WORK OF ELECTRICITY
IN
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This work contains all the articles upon the subjects of offices of electricity in the human body, offices of electricity in the growth of plants, origin of species, offices of electricity in the earth, offices of electricity in the solar system, and the short pamphlets on the philosophy of storms and seasons, and the evidences of character.

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THE OFFICES OF

ELECTRICITY IN THE HUMAN BODY;

AN EXPLANATION OF GROWTH, MIND, AND THE WORK OF REPAIR.

CHAPTER I.

THE importance of discovering what the offices of the subtle agent called electricity are in human and animal organizations, and the belief that such offices were capable of being understood, have induced us to examine this problem with as much care as it was possible to bestow upon this department of the operations of this influence in the affairs of nature.

The essential facts we think we have discovered of the operations of the influence in our bodies, shall be given in the articles we will publish. The amount of work of description necessary to disclose what we believe to be the more important offices of this agent of creation in our organizations, will preclude us from giving it all in one article.

In what we shall state, if it be true there can be discovered a solution of the problems of life, mind and growth.

The question of the truth of what will be stated must, of course, be left to the decision of the scientific and thinking world. We give our conclusions only that they may be examined; and if found to be true, that the world may have the benefit of the knowledge.

The best evidence at present of the truth of any proposition we shall advance, is the examination of such propositions which the scientific world may give, and only when they are examined, and declared to be true by competent examinations, do we expect they will be accepted by our readers. The evidence we shall offer in support of our propositions is intended only to cause the theories advanced to be carefully examined.

It is a fact, of course, that the writer is confident of the truth of such propositions as are going to be given, and it is the belief of the writer that scientific associations will find that they are true; but this is not evidence for the reader, and we are anxious to avoid any error being made on the part of our readers by any article or proposition we may publish.

The uses of electricity in the human organization are so numerous, and so important, that it may as well be stated at once that without the currents of this influence in our organizations, our bodies would be no more than a piece of wood or clay.

There is only a composition of such materials in the body of a man or an animal, when this vicegerent of creation, called electricity, is out of it.

In the absence of this wonderful influence the body is without life, mind, or feeling; and in no organization in nature can either of these elements of a living being be found, except when they are produced by currents of this influence coursing through them. Just in proportion to the extent of the operations of electricity in any of the organizations of the Creator, will such creations possess life, feeling, and consciousness. It is of no consequence what the organization is, for alone on the currents of this agent of our creator does it depend for what of life, consciousness, power of motion and capacities of feeling (so often called the senses) it has. In all of the organizations of the animal kingdom there is as much plant as animal, and in all plants there is as much animal as plant, so far as the substance of such creations are concerned.

It is only in the difference of the offices of electricity performed in such organizations, and in the differences of their forms, that we can discover what constitutes the plant, and what constitutes the animal.

In this great truth, the scientific world is in the future sure to find all the means they can desire for obtaining a knowledge of the origin of species, for if this fact can be established, the origin of animals must depend on the production of plants and their decay. The necessity for such a condition of creations as plants, before animals could come into existence, will be observed, when it is known that a plant depends on the earth for a sufficient force to constitute its growth, and that animals and man depend on a force generated within their own organizations for their growth.

No animal could exist without an origin of the species, and the plant kingdom has furnished all such originals. When this truth is established, and we are confident it one day will be, the world will be willing to recognize the mistakes of the authors of evolution, and the teachers of an entirely miraculous creation.

In this article it is inappropriate to discuss the question of the origin of species, but hereafter the subject will be thoroughly examined, and our conclusions given.

In our examination of the question, a description of all the methods of evolution of life and separate orders of animals, will be undertaken; and when it is important to discuss the problem of a future life, we shall also undertake to disclose the origin of a human soul.

Let us now discover, if possible, what our bodies are created from, and what it is that produces in them the different orders of the manifestations we can discover.

Every organ in the body is grown by the operation of some power. We all know this. Every organ is capable of doing something in the economy of the entire organization.

Some force is exerted by which all the organs can be moved, and the whole body also. Some influence is operating in every part of the body, capable of giving the sensations of all the senses of the body. Some construction of substance is given to the brain, capable of so acting as to afford a means for the manifestation of mind, whatever that may be.

These different phenomena are all produced either by one agent or influence, or each of them are produced in a way we can as yet discover no cause for. It is the agent we call electricity that is doing all these different kinds of work in the system, or it is an agent, or different agents, of which the human intellect is entirely without means of discovering.

To admit that all the functions of the body are performed by electricity, and that the mind is only an electric phenomenon, imposes on the one who claims this the task of disclosing the *modus operandi* of this agent in such phenomena. To deny that it is electricity that performs such work, and that it affords the brain all there is of capacity for consciousness or thought, of course relieves us from the necessity of finding a cause for these phenomena, for it is not expected, and the philosophers of the past and of to-day have yielded the problem as one insolvable.

The attempt to establish the fact that thought or consciousness are produced by a change in the substance of the brain, is abandoned, although the fact is established that there can be no operation or manifestation of the mind without some change actually taking place in the substance of the brain.

In our description of the philosophy of thinking, and the creation of consciousness, the causes of the changes in the substance of the brain that take place when a thought or the will is generated, will be seen and understood if our description of this philosophy is correct.

Now when an animal or a human form was established, and the way they obtained a beginning will not here be discussed, their organizations were calculated for the operations of this agent we call electricity, and also for this agent to operate them, and we now will state that every animal and human being is an automatic electric motor of such complicated construction, (excepting the lowest orders of creatures) that every motion, sense and manifestation of intelligence is produced through the influence of this agent of all nature.

To say this amounts to little, and if it were not possible to prove the truth of the statement, it would be a very reckless assertion.

The same statement can be made with respect to vegetable productions, for they are no less than animals of less capacity for moving and exhibiting intelligence. In a future article the *modus operandi* of the development of plants will be given.

In our present attempt to delineate the work of electricity in the human body, we can make no comment on the uses of this agent in plants, except to state that it is identically the same as in our bodies so far as it is allowed an operation. The difference is solely in the extent of its operations. The plant, as we have stated, obtains a power of construction from the earth, and which is but an electric current, and our bodies obtain a power of construction from the atmosphere which is also a current of this influence, and which is augumented in the body by the generation of the influence in well prepared generating batteries. The most useful and the most beautiful operations of nature, outside the animal and human organizations, are to be discovered in the employment of this great agent in producing the vegetable kingdom.

Our readers, in the future numbers of this paper shall have an opportunity of reading a description of this benignment office of this agent, and it will be the first time in the history of science, as we believe, that the method of the Creator in this great department of nature has been disclosed, and it is our belief that every teacher of science will be willing to investigate the facts we shall offer to established the truth of what will be proposed. Now, in obtaining electricity from the atmosphere, every person and animal is receiving a breath of life, which operation is a literal verification of the declaration in Genesis, that God breathed into the nostrils of man the breath of life. He did do this, and our nostrils are created and left open for no other purpose than to receive this breath of life. An insignificant use of another character is made of the nose, but it is only an ordinary incident of a design of all creations to make as many uses of every thing as it is capable of performing.

In our lungs there is a very well arranged means for delivering the electricity of the atmosphere to the blood, and it is appropriate to state that these organs are created for this purpose only. Every inspiration of the atmosphere bestows to the blood in the lungs the electricity necessary to cause the heart to expand about four times.

This action of the heart is simply a repetition of the action of the lungs.

The atmosphere, when drawn into the lungs is performing a veritable cyclone, and when discharged it is simply a mass of carbon in the form of gases. "Carbonic acid gas" is a common term in the descriptions of atmospheric gases, when deprived of electricity. They are rendered the same kind of atmosphere as before when this agent circulates in them again.

Now, every organ in the animal and human body is a magnet, and capable of discharging and absorbing electrictity. The discharge of this influence from such organs is, as in every object that does discharge it, produced by the pressure of the substance of the organs upon it, or by the absence of the influence in one or more of the organs, into which it will pass as air or water goes into a vacuum created on their borders, and the whole body will attract this agent from the atmosphere through the lungs and discharge it at the surface of the organs and body. In this circuit of this agent only a movement of it is performed as in any other circuit of its coursing. Any person at all acquainted with the character of the action of electricity will understand that it is capable of circulating rapidly only where it prescribes a circuitous route. When this is not allowed the influence of the current is simply diffused through the atmosphere and rendered useless except to create an equilibrium of the appropriate elements of our atmosphere.

The operations of this agent of our creation, and of all creations, does in this circuit through our bodies perform every function of our organs, or bodies that is not performed through the exertion of the will, and these operations are only possible by the employment of the agent obtained by our breath, and the organs called the blood and marrow. These organs, the blood and marrow, are operated solely by this current sweeping through our systems, and are only auxilliary agents for the more complete work of the current derived from the inspiration of atmosphere.

The marrow here referred to includes the medula of the brain, nerves and bones. Now when our lungs are expanded, we behold the first operation of this agent in our bodies. The attraction of our organs for the influence draws the atmosphere into the lungs, as a current of this agent from a fire or a decomposing body causes the atmosphere to ascend over such decomposition. The gases only fol-

lowing where the current creates a vacuum. The expansion of the lungs is due to the influence of the electricty in entering every interstice of these organs, and the influence is capable of expanding everything in the universe in the same way, if it is given a similar opportunity. The current passes into the arteries that deliver the veinous blood to the heart, and carry this blood into the heart in precisely the same way that the current of electricity in the atmosphere carries the gases of the atmosphere into the lungs, and when the blood thus charged arrives at the heart, the current is capable of expanding the auricles of the heart in precisely the same way it expanded the lungs, and when such parts of the heart are expanded, the blood will fill the auricles as the atmosphere filled the lungs. This work of attracting the veinous blood of the lymphotic channels of circulation is what the doctors are anxious to discover, for they are confident the heart is not capable of doing the work of throwing the blood quite around the channels of circulation, and in our further explanation of this wonderful office of the heart, and its motions, it will be seen that it only allows a focus of the currents of electricity that are obtained from the lungs, and that the currents of this agent perform all the circulation of the blood that ever takes place.

When our hearts are expanded by this influence, it is possible for the veinous blood to flow into the auricle of the heart from which it is carried to the entire limits of the organs of the body, and in this operation of changing from one auricle to the other, the blood receives the undecomposed substance from the thoracic duct or conveyance of fluids from the stomach. The influence of electricity upon the blood from this point is augumented in a way the scientific world should know, for it is simply a process upon which all growth of the organs and muscles depend, and as important as the circulation itself. The additional influence this agent exerts on the blood after it is impregnated with the fluids from the stomach, is a further decomposition of the corpuscles of the plants, and animal substances taken into the system as food. In this process of decomposition of such corpuscles, only a combustion of such small objects takes place, and it gives to those that are comsumed while burning, a fiery appearance as any slowly burning carbon presents.

These burning corpuscles are what are called the coloring matter of the blood, or red corpuscles. Those which appear to be white are soon made red, by a similar process of the following pulsating currents of this agent of our circulation.

The way the combustion takes place is identically the same as that of any substance that is decomposed or fused by a current of electricity.

This statement can be found to be true, by any careful observation through the microscope, of the decomposition of blood-corpuscles, and it is of no importance whether the blood be in an artery of an animal or person operated upon only by the electric currents of the circulation just described, or in a clot charged by a current from a galvanic battery. In either case, a combustion of corpuscles will take place. A variety of salts will do a similar work on the blood when out of the body, and simply by the currents of electricity evolved by their decomposition.

When the heart is giving out the augmented blood, a contraction will take place of all the muscles around the auricles, and they will contract simply because the cause of their expansion has been attracted to all the organs of the body, and no valve is closed except to prevent the blood going in any way but to the surface of the organs, and back through other channels.

The uses of the pulses are to create tissue or cellular constructions, and without such a pulsating character of the passage of the electric currents through the system and out the surface of the organs and body, no tissues of any character like those that exist in the organs or body could be constructed, for the cells of the tissues are created by a pulsation of the current of electricity that sweeps through the blood and escapes through the orifices in the organs and skin.

The pulsations of the blood are a veritable tidal-wave of this fluid in the body, and produced by the same kind of influence that produces the earth's tidal-waves, and by the same character of operation. The philosophy of the blood's circulation can be witnessed by any one who will stand on the banks of a river where the tides are capable of ebbing and flowing, and watch the move-

ment of the water in the flow of this wave.

The heart is so much smaller than the lungs, that it requires a greater amount of time to dispose of the electricity the lungs imbibe than is required for an inspiration by the lungs, and the lungs will not attract a fresh supply of this influence until the previous supply is absorbed by the heart, as just described. Now, let any one who thinks this proposition a reckless one, watch the operations of his lungs and heart, and see if the lungs are not in the habit of waiting for the heart to exhaust them and the blood in the arteries of the lungs of this influence before a second inspiration is taken.

The presence of this influence in the lungs, and the blood in them, can be felt until the heart has pulsated four times, or if the person is weak, three times, and the influence will be felt as pressing the chest and lungs after the exhalation of the atmospheric gases of the breath. The necessity for such pulsations as we have adverted to, required such an arrangement of the heart, with respect to the lungs and the reception of this force.

The next office of the electricity in the blood after causing the circulation and decomposition of the corpuscles in the blood, although performed cotemporaneously with these operations, is to construct the organs, or perform the growth of the organs and entire system. We are now assuming the complete organization of the body, but in a later part of this work we will speak of the construction of the organization.

When the decomposition of the corpuscles takes place, there is left in the blood only the influence of decomposition, and the sediments of such corpuscles, and the water of which the blood is almost entirely composed.

Now, if this is so, where are we to find the material for the construction of our tissues, and all the other substances of which the body is composed?

The waste water and sediment are carried off by the kidneys, and are lodged in these organs on their return from the arteries and capillaries, for a purpose which as yet the world of philosophers have never noticed. Of course, the idea I shall advance may be an error, but if true, this statement is proper.

The substance of the growth of our organs that are composed of muscle, or what is commonly called flesh, is the same as the substance from which our solar system was constructed, and the same as that which every object in nature was created from.

No discovery of the works of the Creator that man has yet made, unless it be the discovery of the philosophy of the solar system by Capernicus, is of more importance to the human family than what will now be disclosed, if what we shall state is true.

The work of cellular constructions, and the union of such cells in tissues, are the productions of the condensation of such electric currents as are produced by the decomposition of the corpuscles in the blood, and which we obtain from the plants and animal food we eat. Such corpuscles as we eat, and which are not dissolved in the process of digestion, are by the influence of electricity in the blood actually converted into electricity again, and this electricity again condensed to construct such species of cells in our bodies, and which would, if allowed to become food for animals, be again decomposed and again converted into cells for the bodies of the animals that might eat them.

The immense importance of this disclosure, if it is the truth that is stated, demands that the teachers of science who are possessed of the means of experimental investigation shall examine this proposition. The means of discovering its truth are so plain that it is useless to deny the possibility of learning it. The appearance of the cells and union of cells in the tissues are as well calculated to instigate such an investigation as the statement just made for the examination of them will disclose as surely as a thing ever was disclosed, the character of construction which has been described, and the tissue will be found to consist of only a chain of cells united in the same way that any chain of organs of a semi-spherical shape would be, if the chain was composed of one cell setting over the complete end of another. The actual process of these constructions is capable of being seen, with the assistance of the microscope, in the growth of plants, and in animals and man, when the blood is so transparent as not to obscure the issuing of cell after cell in the cuticle, or skin. The hair of the thistle, or the hair of a squash vine, or as small a hair of any plant will disclose the philosophy of growth, we have described, and the condensation of this vicegerent of God, called electricity, can be seen in the creation of cells in these hairs,

and the phenomena has already been witnessed and noted, without the discovery of its vast import or purpose. The teachers of science are in possession of a knowledge of this wonderful operation, so far as the phenomenon is concerned.

Now, if it is a fact that we, like the whole solar system, are condensations of electricity, can we not discover what creates those parts of the body that are not composed of such immediate or original condensations of this influence? For instance the hair, eyes, teeth, nails and bones, and the medula of the brain, bones and nerves?

This part of our task is partly performed in the discovery of the construction of the organs of flesh, for as sure as the flesh is a condensation of the influence the Creator employs in all his works, these more solid substances must be a construction from the same influence in a more condensed condition. The bones are as well understood as any part of the body, and are supposed to be the result of some process of growth like that, that produces the other organs. The eyes are constructed before birth, but they are also supposed to be productions of some process of growth, and the nails, and teeth, and hair are supposed to be grown in a manner similar to the organs of the system that are composed of muscle and flesh. If what we shall state is the truth, neither of these organs are constructed by a process of growth like that which creates the other organs of our bodies, and a different process will be shown. The only substance in each of these organs is the undecomposed carbon and mineral properties in the brain, and in the marrow of the bones and nerves which is thrown to the surface of the marrow in the skull and bones, or discharged at the extremities of the nerves in the eyes, teeth, toes and fingers. The explanation of the construction of each of these organs will be given, and we ask the scientific investigators to particularly observe what is going to be stated, for the analysis of these important organs that will be offered, will, if true, greatly advance the work of the medical profession, and the anatomist.

The hair shall first receive our attention, for its creation is connected with the offices of the blood, already described. The explanation of the growth of such an adornment of our persons will disclose the character of the philosophy adapted by the Creator to clothe the different animal species with the coverings appropriate for their organizations and conditions of existence.

The wonderful cause of the growth of hair on the horse and other animals, the growth of wool on the sheep, the growth of feathers on the fowl, and the growth of bristles on the hog, while all of these animals exist in the same latitude and eat of the same food, to a great extent, is within the reach of human inquiry, and it shall be discovered if we are correct in our conclusions.

The marrow in the bones and skull is little more than a mass of corpuscles, obtained in the origin of our creation in the wombs of our mothers, and they are the original centers of attraction that originate the development of the human body. In our discussion of the origin of species these centers of attraction will be carefully considered with respect to their origin and purpose.

The growth of these constructions is obtained in the same way the growth of the flesh is obtained, and the waste material of their composition is employed in creating the bones that surround them.

The decomposition of these centers, or great generators of the auxiliary currents of electricity of the body, is accomplished by a process identically like the decomposition of the corpuscles of the blood, solely by an electric current being charged through them, and instead of their sediment being carried off through the kidneys as the sediment of the blood corpuscles is, it is thrown to the surface of these batteries, and there contracted or solidified into what we call bone, and the skull and bones are simply undecomposed carbon, so robbed of its original qualities as to be only partly condensed amounts of broken and burned corpuscles.

Every part of the body, if decomposed by electricity to the same extent that the marrow in the bones is in the lives of our persons, will become as white and imperfect carbon as the bones are. Now, the decomposition of these masses of corpuscles of course generates currents of electricity, which is discharged at every orifice in these bones, and thrown quite out of the matter around them into the atmosphere.

If it could not be discharged in this way the bones would be exploded. The human family has had an immense amount of experience with the effects of a suppression of

such currents in the bones and head. The experience has been the possession of gout, rheumatism and headache, and the obstructions are sometimes sufficient to cause an eruption of the bones and flesh of the character of a felon or destruction of bone under a contusion. In the escape of these currents to the surface of the body, the particles of this carbon that are not allowed to incrustate on the surface of the bones are deposited in the blood, and some of them are swept around the system, and the rest of them are thrown out on the surface of the body by the additional currents of this agent of construction the marrow generates and the piles of this stuff thus thrown out constitutes the hair on our persons, and its existence or locality is in every instance a perfect verification of this theory of the uses of this waste carbon. In every part of the work of the Creator there is an example of economy for man to copy, and the economy in the use of waste carbon in our bodies is still to be seen in other equally interesting and important orders of work.

The hair on the body, wherever it may be, will correspond to the size of the marrow battery beneath it, and the proximity of the battery to the surface. Let all who see this article look themselves over and see if this statement is not true. The wisdom of the Creator is not more manifest anywhere than in this method of giving all his children an adornment of so beautiful a character that the maid and the young man who are so eager to please each other by appearance, will spend hours before the mirror in arranging these glorious tassels on their heads. Let them hereafter remember the device employed by their Creator in giving them these blessings, and thank him as earnestly as they are devoted to each other. Man is able to discover the work the Creator has done for him, but only when we have learned what that work is, will we be able to comprehend the divine attributes, for all the attributes of the creator are to be obtained in some degree by his children.

The carbon that is floated about the system in the blood is discharged at the surface of the organs and body, and a crust, in all respects like that on the turtle, except in its thickness and form, is created all over every human body. This crust is the paladium of our magnetic aura, and has only to be rubbed in order to excite a current of electricity on the surface of the body.

The proof that the creation of hair on our bodies is accomplished as just described, is in a measure seen in the fact that the hairs on any part of the body will rise or stand out when the battery beneath them is excited, for they are tubes for the influence to escape through when the current is increased by our fears or excitement; and when crowded by a great current of electricity rushing through them, they will conduct themselves like a cloth funnel crowded by a violent stream of water coursing through it.

Old puss is sure to have her hair crowded in this way all along her back and tail, when her kittens are in danger, and all animals that are capable of being excited by the approach of danger will display a similar result of their excitement.

Now, what is it that causes anything but hair to be piled up on the different species of animals that exist in the air and on the land? If the blood is capable of decomposing all the corpuscles in it, what is it that enables the different character of clothing to be built up on the bodies of the foul, sheep, horse, hog, and the crusted creatures of the earth? It is simply a difference in the digestion of the animals that have a circulating fluid of the character of blood, and the crusted animals obtain their crusts in exactly the same way that our bones are created. What a simple solution of this problem, if it is correctly explained? The truth of the proposition is capable of very simple demonstration.

Only an examination of the digestive organs, or the blood, or the excretions of these animals is necessary to determine whether this theory is correct. The examination of either will demonstrate the whole philosophy adopted for the clothing of such beings as were and are unable to clothe themselves. The wise construction of the digestive organs of these inferior creations is one of the most striking items of proof of a designer of all the affairs of nature, who is both intelligent and personal.

CHAPTER II.

In the preceding chapter a cessation of the discussion of the character of the work electricity is doing in our bodies, was made at the proposition advanced that the organs of

digestion were so arranged in the several animal species, as to produce the different productions upon the bodies of animals of the character of hair, wool and other coverings necessary to protect them or keep them warm. The entire description of this philosophy was not given and the rest shall be undertaken now. In the description of the growth of hair, it was seen that a substance of a character similar to the substance of the bones, was pressed into the blood by the electric currents generated in the marrow of the bones, and that the united current of the bones, or their marrow, and that of the blood crowds a portion of this substance to the surface (of the body) where it is piled up in the form of tubes, constituting hair. If the construction of the human hair is produced in this way, and it can be very easily discerned, it must be some similar process in all animals that have a circulation of blood, or such as all animals have that produces on them the kinds of clothing they are possessed of.

It is precisely the same kind of substance that is contained in all these various kinds of productions on the bodies of animals. Even the shell of the turtle or mollusk is a condition of carbon almost identically the same as the substance of hair, or wool, or feathers.

It is only a mass of carbon of partly lifeless particles instead of tubes, as in the case of hair, and the whole order of crusted animals are covered with the same kind of stuff. Now, what can cause this variety of productions on the bodies of animals, if it is not a difference merely of the condition of this substance when in the blood? This is more easily asked than answered. If our theory is correct, in every animal's blood there is, of course, an amount of matter of the character of the bones discharged into it by the bones and corresponding to the size of the bones, but it is only perceived in a greater growth of hair over the spinal column and other bones. Now, if it is a fact that the organs of digestion permit the passage into the blood of some kind of substance like that of which the hair and other coverings of animals are composed, there is means of such growth of these coverings, and besides this possibility, the only power of growth of any animal is in the blood, and the substance of growth must be in the blood. Now, what is this substance and what is the cause of its getting into the blood if it is not bestowed to the blood through the organs of digestion? The substance is only a part of the carbon of the food that animals eat, and that part of it that is allowed to pass into the circulation. The organs of digestion in the animals that have clothing of hair, feathers or wool are incapable of wholly eliminating this part of their food from that part which passes to the circulation, as it is eliminated by the organs of digestion in human beings, and it is discharged at the surfaces of their bodies, and the piles of this substance will either be one continuous tube, as hairs are, or they will be tubes with branches as in the case of feathers. This carbon is only broken and partly decomposed corpuscles and tissues in food. The beautiful productions on birds are as pleasant an aspect of the wisdom of creation as one can desire to behold. The construction of feathers on the bird is absolutely necessary in order to enable them to fly, and the wings are only a portion of the means by which the bird is able to soar in the air. The reason why all the feathers assist the ærial movements of the bird is, we believe, unnoticed. Every one is aware that feathers are non-conductors of electricity, and when off the bird, they will soar alone to a considerable extent, their tendency to gravitate toward the earth being very slight. When it is ascertained that the earth is constantly discharging a current of electricity toward the sky, the power that carries these feathers can then be known, for the current is capable of lifting anything that is so completely robbed of electricity as the substance of feathers. The smoke arising from a fire or chimney is another example of the power of this influence to lift carbon into the air, and the atmosphere is lifted too when a current is produced as strong as that generated by the explosion of gun powder or a body of nitro-glycerine. All of the feathers of a bird are crowded upwards by the current discharged by the earth exactly as the balloon is, and this assists a bird in its flight. When man has perfected a flying machine, it will be only a balloon, and it can be propelled only by a pressure of the gases of the atmosphere on its sides, similar to that exerted upon the wings of a bird.

The branches on a feather are produced just as our hairs are produced, simply by a further decomposition of the carbon in the interior of the quill, by the electric current that passes through and throws it out. The current

thus augmented will be discharged on the sides of the quill that are the least obstructed and will carry out some of the carbon with it, and construct piles of it on such sides, as we behold them on every feather.

In some of the largest branches the operation is repeated, and a finer construction of branches is the result.

What a beautiful operation of nature it is that will construct so pretty and useful a thing as a feather.

The colors of feathers are obtained by a process similar to that which stamps all flowers with colors. To describe here the *modus operandi* for producing color, would be taking a wide departure from the subject under discussion, and it must be left to a work upon the growth of plants, and which our readers shall have.

Let us now undertake the discovery of the methods of the growth of shells and scales on reptiles and other animals.

The object of this examination of the coverings of animals is to afford the reader the opportunity of obtaining an idea of the decomposing influence of this agent we call electricity. The alligator and all similar species of reptiles have a limited circulation of the blood they possess, and in proportion to the circulation of their blood will they possess a broken and uneven growth of their shells or coverings. In these examples of the influence of the electric currents discharged by the blood, can be found the means by which the different species of animals can be placed in the chronology of animal existence, according to the period of their creation. Any scientific teacher can see why. This subject will be carefully examined when we give our views upon the question of the origin of species.

The shells of snails and the simpler mollusks are constructed of one mass of the decomposed substance of their bodies precisely as our bones are constructed around the marrow in them. In these animals there is no blood or any fluid of such a character. What then is it that creates scales or horns of carbon on other incrusted animals, if it is not the carbon thrown out from the blood and by the magnetic influence it discharges?

If the philosophy we have advanced is correct, we have found the actual arrangement for the creation of the clothing of all animals. Then we ask what is to become of that theory of development that supposes the development of all species of animals is produced by the operation of outside influences? Can it be claimed that the alligator's shell is produced by the condition of the water or atmosphere around him, when we can see the entire operation of its construction in the philosophy we have described?

Every snake is clothed with scales, which are constituted of carbon as all shells are.

These reptiles are provided with a partial circulation of blood, and their scales are the result of this circulation. All scales and prominences on the bodies of the reptile creations are approaches to the construction of hair and are created as our hair and nails are created. What a good index this truth affords of the position of the human family in the order of progress, or of living organizations. So perfectly organized is the human body, the only use made of the carbon in it in the way of a covering, is in the construction of a small amount of hair where it serves as conductors of electricity generated in the batteries of the body, and to ornament the organization.

The adornments of animals by the productions on their bodies is as well provided for as our own adornments of a similar character, and in respect to colors the animals are given more gorgeous coverings in many instances.

The plumages of some varieties of birds are as beautiful as the eye could wish to behold, and this grandeur of appearance is a means of protection for such birds as parrots, peacocks, and other species that are capable of exhibiting a variety of bright colors. This work of display on such creatures will please many of the brute creations, and frighten others, and this effect of color can be observed to a small extent in the behavior of domestic animals toward fowls.

Now let us return to the human body, and see what this agent, electricity, is doing in those parts of the organization not yet adverted to. In every corner of the organization this sly influence is operating and performing a useful work. Its work in the blood is, perhaps, sufficiently described, when the methods of creating animal heat, and the cause of our strength are explained. The philosophy adopted to keep us warm is nothing more than a careful provision to prevent us from being burned up, for a greater combustion of carbon in the body than now takes place would surely burn us up. The flow of

this agent through the body is arranged in a way to do all the burning of carbon that the welfare of the body requires and no more, and that is just the amount that has been described, except that the electric tubes on our heads are very often burned as badly as the cigar that is converted into ashes while one is smoking it. These tubes when burned will look very much like the decomposed end of a cigar. On a negro's head the combustion is so rapid that the coils are produced close to the head, and the hair is first curled by the heat that is smelting it.

The heat of the blood, the reduction of which makes us feel cold, is created solely by the decomposition of corpuscles in it, the process of which has been explained, and in this creation of heat, there is only the purpose, of generating electricity to construct the system, to be performed, and the possession of heat by the body is only an unavoidable consequence of this process of generating electricity. If our bodies could be created and operated without the generation of this agent in them, there would be no necessity for heat in the body. There is actually no use for the animal heat except to preserve the body from the effect of freezing, and all the cold-blooded animals are able to avoid this effect of cold only by occupying a locality where the atmosphere is at a temperature above the freezing point. Serpents are of this class, and they occupy caverns and warm places to prevent death from cold.

Now, the strength of our bodies is the amount of electricity in them, and with what the nerves and brain and marrow in the bones add to that in the blood, there is in our bodies a power of such enormous extent as to give our organizations all the force and means of growth, and the force for every motion of the organs and of the entire body. The force is in every instance created by the motion of this agent. No atom of substance in the universe is capable of operating itself or causing other atoms of substance to move, and no atom ever is moved by any inherent power of its own, and the influence we are describing is as helpless as atoms in respect to its capacity of moving.

The agent is always assisted in its motions by a power called momentum of moving bodies. The momentum of the operations of our atmosphere is the power which the agent is always affected by in its own operations. The nerves can inform the currents of electricity in the blood what the great battery in the head commands, and it is accomplished only by the nerves employing the momentum of the current the brain generates, and sends to the organ to be moved, or the object to be moved to.

Every object in existence is capable of discharging an electric current, and every object is doing it. The current that each object generates and throws off, depends on the degree of rapidity of its decomposition, for the current is produced by the decomposition.

Part of the decomposed substance is converted into atmospheric and other gases, and only a small amount of the substance is returned to electricity, its original condition. Every influence thus created in or on the surface of the objects around us, will operate on the electric influence of our bodies and create a constant exchange of this agent between such objects and ourselves. The change of this influence is all there is of what is called attraction of gravity, and it is all there is of that other interesting kind of attraction we call love. The way the attraction is exerted is simply the opening of a passage in the atmosphere, or the creation of a species of vacuum in the gases of the atmosphere into which the two objects are pressed by the gases on the opposite sides of them.

In the case of lovers the vacuum is generally filled with two human organizations, as they are powerful attractors of the electricity each generates. Now the aura of this agent around every object in existence is extended to every object within a certain distance of the object that generates it, and the brain is influenced by such emanations from all objects around it. This effect is the means of acquainting the brain ot the existence of objects we cannot see, and it affords a causeway over which the brain can direct the current of electricity of the body or an organ, to go. The brain is only able to discern the attraction of surrounding objects, and to respond to them, by serving a current of this agent to them. When it is doing this, a current from the blood is also sent, and it is capable of propelling the organs of locomotion, and actually performs their motions. The use of the legs are thus controlled. The reason why one leg is moved at a time is because the atmosphere is capable of keeping us on the

ground, and does it in the same way that its gases push the steel, or any metal, to the magnet. The inability of persons to ascend the atmosphere is caused solely by our being pressed into a quasi vacuum created by the earth's magnetic current in the atmosphere, and a leg cannot be raised from the earth until the attraction of the earth is confined to the other leg. It is always a fact that before we can raise one foot the other must possess the whole attraction of the earth upon the whole body; and when this is accomplished, the one that is deprived of the attraction is controlled by the attraction of the objects to which we desire to move. The transfer of the attraction of the earth from one foot to the earth is accomplished by the will or brain sending a current from the brain to the foot to be advanced sufficient to create an attraction around it. This controls the action of that foot until the other is operated on in the same way. The fly is known to suspend itself on the ceiling by excluding the atmosphere from under its feet, and it is capable of shifting its feet as fast as it is attracted to some point on the ceiling. Our walk on the ceiling of the earth is only a similar operation. It is of little consequence at what point of the earth's rotation we may be, our sticky feet will continue to suspend us from the earth's ceiling.

The way the motions of the other organs are performed is identically the same as the manner of moving the legs. All the motions, other than the involuntary motions, are the result of an attraction of the character described, and the brain is the organ that creates the paths for the organs to move through.

Some of the organs of involuntary motions, for instance, the intestines, the bladder, the organs of digestion, in discharging substances from them, are enabled to do this by the creation of gases in them; and the decomposition of the substances in these organs generates these gases. Every one of these organs is emptied of its contents by the gases and electric currents generated in this manner. When a sufficient amount of these gases and currents are generated, they will crowd open the orifices for such discharges and force the contents of the organs through and out such channels of escape. The philosophy of the syphon is also operated in the discharge of fluids from the bladder. The intestines are cleared of their contents by a pushing of the gases generated in the stomach. The chyle is thrown into the thoracic channel by the same force that crowds the other portion of the food into and out of the intestines. The chyle is much lighter than the substance that is forced into the intestines, and is for this reason carried into this channel and to the heart. The organs of the body called chords or sinews are to clear the muscles of their electricity when the organs in which the muscles exist are to be moved. This work is accomplished by the contraction of these sinews, and the contraction is accomplished by the brain absorbing the electricity in the sinews. When the sinews are contracted, the currents of electricity in the muscles and the blood in the veins of the organ to be moved are squeezed out to a considerable extent by this motion of the sinews, and allowed to perform the work of motion, as just described. The sinews are always contracted when an organ is moved. They are a species of nerve, only different from the common nerve in the fact that each sinew is a single conductor of the magnetic influence. The nerves are usually several conductors united. When a sinew is contracted, the electricity in it is attracted to the brain and allowed to assist the operations of motion of the organs and body.

The uses of electricity in the organs of digestion shall now receive our attention. The importance of the work of this influence in the preparation of substance for the development of the body will be seen, and its conduct in this work is as interesting as any of its offices in the body. The human family could avoid or remove a countless variety of diseases if it was known that this vicegerent of the Creator is the principal factor in all the operations of the organs of digestion. A knowledge of this fact will enable the profession of medicine to cure or prevent all diseases arising from the imperfect operations of this influence in these organs. Now, when it is stated that the organs of digestion are only calculated to separate the corpuscle of the food taken into the stomach from the impure or partly decomposed corpuscles and to push them into the thoracic channel and circulation, and to push the waste material into the intestines, the purposes of these organs are disclosed; and when it is stated

that the separation of these different substances is performed wholly by the influence of electricity, the power that accomplishes this work is also disclosed. The philosophy operated to decompose the food and disengage the corpuscles from the broken and partly decomposed portions of the food, is as perfect as any of the works of creation whenever this agent is employed. How is it done? The work is so important it certainly should be understood. It can be copied by us in the task of obtaining electricity. The duodenum is attached to the stomach for the purpose of catching the waste currents of electricity generated in the stomach, and it is always prepared to charge that organ with a current of the force when a fresh supply of food is taken into the stomach.

This commences the operation of decomposition, and this office of obtaining corpuscles for the blood and throwing other substance off in another direction, is then continued in the same way that electricity will separate the substances of any solution of metals and carry the different substances to the objects that attract them. The corpuscles are carried to the blood, and all other matter pushed out of the stomach. The tissues of the food are also separated into cells or corpuscles. The electric current that is capable of performing so much important work, is obtained through the pneumogastric nerve, and it is obtained in pulsating currents exactly as the blood obtains it. These currents are a part of the currents obtained from the atmosphere through the lungs. The use of them is to separate the carbon that is partly decomposed from the corpuscles or complete organizations called cells in the food, and this is done only by the current being charged through the mass as often as it is stirred up by a pulsation of the walls of the stomach. Of course this operation decomposes the partly decomposed carbon more, and it would decompose all the corpuscles as it does a part of them if they were not hollow and lighter than the broken masses, and therefore lifted into the thoracic channel as fast as produced. The water in the stomach is carried along with these corpuscles into this duct or channel as the blood is carried from the arteries of the lungs into the heart, and by the same agent.

The decomposition of any object by electricity, is performed in the way our food is decomposed.

The earth under any plant is operated on in the same way, and it is the corpuscles of the earth in the shape of atoms of oxygen, nitrogen and hydrogen that are decomposed by the currents of the earth, that are carried into the plant.

In our description of the growth of vegetable food, every operation of the philosophy that produces it shall be given.

In what is stated here concerning the preparation of substance of growth in our bodies, an idea of the germination and growth of a plant can be obtained. The difference in the operations is slight. The corpuscles of a plant are mere atoms of matter.

No chapter in the libraries of our colleges can interest the reader more than a truthful disclosure of that unravelled mystery called vegetable growth, and it is our purpose to undertake that task.

From this globe we call the stomach, and from the soil in it composed of our food is obtained all the nutriment of our bodies. Plants obtain their nutriment from the globe we tread. Each globe furnishes the power that lifts the nutriment into the circulation of the body connected with it.

The plant obtains all its current of the power from the earth, and man and animals obtain theirs from the atmosphere and the batteries in their bodies.

The analogy is only one of a countless number in the gradations of the unfoldment of natural organizations. No wonder of nature is more interesting than these repetitions of methods which are always performed as long as it is practicable to repeat them.

The offices of the nerves, the small conductions of electricity in the body, are what we will undertake to examine now.

Their uses in many respects are of a character of which no notice is taken by the teachers of science or the professors of anatomy, or medicine. The unobserved offices of these organs are as important as any that are observed, and as interesting. Let us point out this unobserved work of the nerves first. We have not yet disclosed the way our teeth, eyes, and nails are created, and it is very certain that their creation will be found to be a portion of the undiscovered offices of the nerves. The nerves are filled with a substance similar to the marrow in the bones, and sometimes there are several nerves in what is supposed to be one.

A current of electricity courses through these conductors, and it is obtained from the brain as the electricity in the sinews is, and as it courses through the nerves, it decomposes the substance in them to some extent as this agent does the marrow in the bones.

The decomposed marrow of the nerves of course will be crowded out at the ends of the nerves as the decomposed marrow of the bones is crowded to the surface of the marrow. In this philosophy of producing a decomposition of medula in the nerves, and also of producing in them an additional current of this influence, the cause of the production of our teeth and nails and those of all other creatures that have them can be found.

Let us see if this is not true. The teeth are identically like the bones in respect to their substance. Their enamel is only carbon more condensed, and the condensation is produced as diamonds are produced by the influence of water and air.

The air will condense every thing it touches, for it will absorb all the electricity it can find.

The water is able to fill the interstices as fast as it is absorbed, and the constant passage of the current through the tooth gradually fills up every channel in its surface and the outer part of the tooth becomes a condition of carbon similar to the diamond. The shape of every tooth will correspond to the amount of carbon the nerve or nerves in it can discharge. No tooth exists that is not a heap of carbon around the extremity of a nerve, or at the ends of several nerves that discharge it.

In each tooth a substance is found exactly like the *vitreous humor* of the eye, and it is only a mass of unconsolidated carbon that the nerves discharge. The only substance besides this carbon in the tooth is this very sly agent of creation called electricity. It is the office of this agent to give us warning when the enamel is broken, and it does so by the pain it produces. The pain is what may be called a message of importance, for it usually commands attention. The teeth are set in sockets of the same shape as those the eyes occupy, and children are allowed a new set when these sockets are so swollen by the rapid growth of their gums and jaw bones that their teeth become loose.

Older persons are allowed to continue a more perfect set, and when they are broken they must take the consequences. In all broken teeth a constant effort to rebuild them is going on, and if it was not necessary to use them in a few months or years they would be repaired as any other injury to the body is repaired. A few instances of this character are recorded.

This will close our description of the production of the teeth, and we think it as well to know that these useful organs are a product of the action of electricity in the system, as to continue a belief in the old idea of the profession of medicine that our teeth are produced from the gums.

Besides the impossibility of the production of such a substance from the gums (as the gums do not contain it) it is impossible for the gums to set the teeth on the ends of the nerves as they are set.

In addition to this objection to the idea that the gums accomplish the production of teeth it will be observed that the horns and tusks of the animal kingdom are heaps of carbon of identically the same kind of composition as our teeth, and they are constructed the same way. The difference is merely in the size and shape of these organs.

Our fashionable young gentlemen and ladies are not apt to consider what the resemblance of their teeth and nails is to the tusks and nails of the elephant or to the claws and teeth of the iguanodon and reptiles of the past epochs of time.

The fossils of these creatures are evidence of the truth of our statement as to the cause of such productions, for it is always the case that their tusks are disconnected from their skeletons. Their marrow being decomposed soon, they are liberated from the skeleton.

In every instance of the growth of such carboniferous protrusions on these animals there is a great amount of marrow similar to that in the human being at the base of these organs.

These most important organs of the animal kingdom give them means of chewing their food and of defence, and in their creation a calculation as to the appearance of the animal is made. Look at the cow or deer, or any animal with horns. Every one of them is improved in appearance as well as benefited otherwise by these organs. What an evidence of the wisdom of creation are the long antlers of a deer or the curved horns of the ox and sheep.

Each creation of the animal kingdom is

adorned in some way, even the snake is constructed in a way that exhibits beauty in shape and in colors.

Now if we can ascertain why our skulls are so uneven on their surfaces we can discover all there is of the science of phrenology.

The difference in the thickness of the skull is due to the greater amount of decomposition of the marrow under such points as are thicker than the rest. It is only a greater heap of decomposed marrow and produced by the greater activity of such organs as are under these thicker portions of the skull. The organs are more active; in other words, their activity decomposes their substance faster than the substance of the others are decomposed. When we come to speak of the cause of this activity the philosophy of their action will be illustrated.

In our fingers and toes there is a termination of several nerves, and at the ends of each of these organs a pile of carbon is created, called the nails. The shape of each pile corresponds to the construction of the nerves at its base. Now, what is the cause of the more harmless character of these human nails than those on the cat or bear, if it is not a fact that the several termination of nerves in these organs in man are such that they do not construct these nails so as to unite all the substance these nerves discharge? Can any nails grow where the nerves in the arms or legs are severed? Does the person who has a finger cut off get anything more than a hooked construction at the point where the finger is cut? or do we ever see a growth of nails if the limb is paralyzed before a growth of nails is produced?

The eyes are only teeth with great hollows in them. They are productions similar to the teeth, and would be teeth in all respects, if the optic nerves were as small as the nerves in the teeth. The use of a hole through an eye is of much importance; a nerve was constructed for its creation so large that its magnetic current can blow a clearing for itself through these organs, and that is all it does. The color or the outer portion of the eye is the same as that of a tooth, and the substance is identically the same. It is a little less condensed. The pressure of the gums on the teeth is all that makes them harder than the whites of the eyes. The carbon thrown into the ball of the eye that is unemployed, is pressed out of the ball by the current discharged by the nerve, and conducted to the nostrils by the eyelids and a channel like that which drains our cities.

This channel is better arranged, however, than those in cities, and its contents are not allowed to overflow where the filth would be destructive to health.

The nose is operated to get rid of it, and if the work is neglected our breathing is interfered with.

In each eye there is a cunning employment of the electricity the optic nerve throws out, and when this office of the current is understood, a more careful observation of people's eyes will be practiced. Every rogue is exhibited by the color of his eyes, and they can be detected as easily as their eyes can be seen.

In the carbon discharged by the nerve of the eye, there is always a small quantity of metallic substance, as in all kinds of substances. The current of electricity discharged by the nerve will decompose this metallic substance to some extent, and it is done in the same way a current fuses or ignites metal anywhere. The illumination thus created is capable of illuminating the fibres of that wonderful construction—the partition between the aqueous and vitreous humors. When the person is willing to observe all the creations of nature, and is content with an honest life, this lattice-work will be of an agreeable color and quite light. If the person is unwilling to let the world see what is in his thoughts, this diaphram will be dark or of a disagreeable aspect. The difference is produced simply because the rogue is studying dishonesty and the means of committing crime. He neglects the use of his optic nerves, and wants to discover the better way of cheating his neighbor, and resorts to the capacities of his brain. The nerves then are allowed to contract, as they always do when one neglects to use them. A mean, little eye is the result of this neglect. What can be said more of the growth of the human body that will interest our readers? and what further offices of electricity are there in the body? When it is seen what the other duties of this agent are in our organizations, this question will appear as premature as to conclude that the stock of a tree will only develop a bark when the bark is all that can be seen.

CHAPTER III.

When we see a person attempting to get into a carriage and in doing so slips back again, we are apt to ask ourselves why a better arrangement for elevating ourselves could not have been devised in the place of what is now employed, viz., a construction of some kind of ladder.

Every one is obliged to remain on the earth, and it is impossible to get up into the air without help of the kind mentioned, and then it is only a limited distance that we can go. The use made of the organs of the brain besides giving us what intelligence we possess, is to give the mind a means of ascending as high as it desires, though the body is confined to the earth. This ability of the mind to soar will always relieve us from the otherwise grovelling condition of our existence. Now, if we could see the atmosphere as the waters of the earth are seen, it would be discovered that we are inhabitants of a fluid so much like water that the difference is only in the density of the two bodies and amount of the agent of creation in them.

The atmosphere is well calculated for such life as exists in it, and the water well calculated for the life that is possible in it. Each of these elements were designed for a certain condition of life, and the animals in these elements were allowed an existence after these fluids were rendered suitable for them.

The work is still being perfected, and with a view of improving the character of the beings in each element.

In the improvement of the character of the water and atmosphere of our globe is to be found the cause of the disappearance of the animals that are now out of existence, and the decrease of those now existing to a considerable extent, and in this same operation of nature the improvement of the human mind is considerably aided.

The influence of atmosphere is everywhere observed in the operations of the intellect, and in the advancement of the character of the domestic orders of animals.

When this important office of the atmosphere is better understood, the explanation will be found of the difference of intelligence in the same races of men who occupy different countries. Emerson said the pure air of New England gave its children their keen intellects. What is to be obtained from a knowledge of our relations to the atmosphere beyond these facts which will be of use to us in this investigation of the offices of electricity in the human body?

All we intend to offer, is the fact that we are connected by the atmosphere and the influence in it, with all the other creations that exist in it. Every one of our neighbors of this sphere of existence is allied to us in some degree of intimacy.

In this relation of ourselves to the objects around us, and such as can operate on our organizations, there is a chance to discover what our minds are and what creates them. The idea of a separate and independent existence of the mind, and its capacity to operate our organs and bodies as a sort of contrivance established independent of the body, and furnishing our ideas or thoughts, must be abandoned when it can be seen what constitutes thought and what constitutes the different faculties. It is impossible to understand what can produce either, until our condition of existence is understood, and in this conception of our existence with respect to the atmosphere, and our surroundings, we can commence an investigation of the phenomenon of the brain called mind. In this investigation we will commence with the further uses of the optic nerves, organs which we were considering at the close of our last article.

The philosophy of sight is little more than the possibility of the magnetic currents, the optic nerves discharge, coming in contact with the currents of the same influence discharged by the objects that are capable of discharging it sufficiently to be felt by the optic nerves. When the object before us is not of this character, we cannot see it. The optic nerves are calculated to afford us sight of only the objects of which a sight is of use to us, and all others are excluded from our vision.

These works of the Creator by which we are able to realize the character of creation and objects around us, are so useful that to be without them is, perhaps, the greatest misfortune a person can have. Now, such very important organs are, after all, only conductors of the currents of this wonderful agent of all motion and sense, from the brain to the surface of the cornea or eye-ball.

The sense of sight is only a sense of feeling, so accurate as to give us an understanding of all the features of a thing thus felt.

In our eyes pictures of the objects in front of us are stamped on the magnetic current of the optic nerves, exactly as any photograph is taken. The currents of this character such objects throw out, will be capable of effecting the substance of the eyes, as a person sitting for a photograph effects the decomposing chemicals on the plate in the camera. Every current operating on each part of the substance. On the vitreous humor of the eyes this operation stamps a picture of itself, and the operation is telegraphed to the brain, and the stamping is there repeated. The motion of the operation of photographing a picture or the character of an object on the vitreous humor of the eyes, is extended to the brain through the magnetic currents of the optic nerves, and these motions are able to produce a picture of the same form on the magnetic aura of the brain.

When any one can understand why a person is able to incorporate their forms and features on a plate of tin, covered with a rapidly decomposing amount of chemicals, they can understand why a decomposing brain is capable of being impressed with the features of an object of sight. The decomposing chemicals discharge a current of electricity as well as any other decomposing substance, and, therefore, any object discharging a current that is capable of reaching such decomposing chemicals, will offer a resistance to the discharge of such current from the chemicals, and the effect will produce on the substance of the chemicals a difference in the decomposition and condition of the substance. Photographs are but copies of the condition of such chemicals after the influence of the person or object photographed is exerted on them.

Now, if what is stated is true, it is possible to contrive some means by which a picture of the effect of currents of electricity on such conditions of substance can be transmitted to distant places and the effect re-exhibited.

To do this will be to obtain the means of acquiring a great fortune. The subject is being studied by a hundred electricians now, and it is our hope that a better idea of the means of accomplishing the operation may be furnished by this article.

The theory of sight advanced by scientific bodies, and generally accepted, is, that an object seen is capable of producing a picture of itself of the same character as our pictures in a looking-glass, upon the interior fluid of the eyes, and that this very picture is the thing the brain sees.

The errors in this theory are seen in the fact that a picture of such a character is not created in the eye, and the further fact that such a picture could not be observed by the brain.

A picture of this character is impossible, and if it was a creation of something looking like the object creating it, the brain could not see the picture any more than it could see the object creating it. We do not see our pictures in a mirror. The picture which appears to be in a mirror is a chemical operation in our eyes, and it is only when our magnetic currents are returned to our eyes is this effect observed.

In all substances incapable of appropriating the currents of our bodies, pictures of our persons can apparently be observed, and when our magnetic influence is absorbed by a body, no such phenomenon can occur. The currents of the objects that appear to be in a mirror are reflected, and nothing else. Every thing thus reflected will be observed as though in the glass.

If it is a picture of an object in the eye, as claimed by physiologists, that gives us the sight of an object, it will be necessary to disclose the means by which the picture gives the brain a perception of it, and this will be as difficult as to discover why any object is not at once perceived by the brain as well as an object in the eye that is produced by the external object.

The difference of the objects is no help in the way of confirming such an hypothesis. It is as difficult to understand how a picture in the eye, supposing there is one, can be perceived by the brain, as it is to understand why the subject of the picture can be seen.

In our explanation of the philosophy of sight, if it is correct, we have only to understand that the currents of the optic nerve are capable of creating the same phenomenon upon the magnetic currents of the brain as the object seen creates upon the current of the optic nerve discharged at the cornea of the eye. This will, in our opinion, be found to be correct, for it is but a question of time when the same kind of method will be devised for the transmission of scenery and motion.

Now, let us see if it is not possible to discover what allows the brain to become con-

scious of such motions of the atmosphere as produce the sensations called sound.

The most improbable explanation of this phenomenon is now accepted by all the teachers of the philosophy of the human body, and those who teach the philosophy of accoustics or sound.

It is just as difficult to discover what carries sound from the drum of the ear to the brain, as it is to discover why the sound is not communicated at once to the brain, or what could carry the sound to the brain if it was carried to it.

If the organs of hearing are simply to augment sound, then the sound need only be increased to enable the brain to obtain it without any other organ than the auditory nerves.

The philosophy of hearing, as taught by physiologists and the medical profession, is like the explanation of sight these authors give, but little more than a make shift. It comes from a want of an exact knowledge of the way this important office of the organs of hearing operate.

Now, while the auditory nerves are, of course, calculated to carry to the brain the operations of the atmosphere that produce sound, they were only allowed to carry just such intensity of vibrating motion or sound as is of use to us. The ear and every part of the organs of hearing are constructed to exclude from the brain all sound of a character that are of no use to us if heard.

If such of the motions of the atmosphere as are not allowed to reach the brain were capable of giving the brain a consciousness of their operations, as they would do if not excluded, the world would seem as one carnival of noise in which no particular motion of the atmosphere could be distinguished.

The simple operation of excluding from the brain all sounds that would be mere disturbances, is one of the most interesting and beningant works of the Creator. All of the wonders of our organizations are as good evidence of a personal and intelligent Creator as any unprejudiced mind can desire, and this arrangement of the ear is but one of a great number.

To claim that a mere law or force operating upon the substance the body would establish the ears or eyes in a way to perform their offices as they are performed, is as idle as to claim that the wind in sweeping through the streets of a city will establish the whole order of things and business carried on in a city. All of our credited agnostics are as willing to discover a good amount of the evidence of the existence of a personal creator as any one, if it is pointed out to them, and it is only necessary for them to discover in what possible way an ear or an eye could be provided without the assistance or design of some creating power directed by intelligence, in order for them to become convinced of the existence of a power of such a character.

The only capacity of the atmosphere to produce sound, is to cause the magnetic current of the auditory nerves to vibrate to the extent that the construction of the ears will permit, and this vibratory motion of the current is extended to the brain; the only possible way to create the sensation of sound. The motion is so modified before it reaches the nerve, that it can be transmitted without doing harm to the brain, and this modification is the exclusion of useless noises. The eyes cannot transmit sound, for the reason that the fluid in the eyes destroy any motion of the currents of the optic nerves of a character to produce sound.

It is a fact that the optic nerves can convey sound to some extent if the eye-balls are destroyed, and in some instances the motions of the atmosphere that give us the sensation of sound, will produce colors or light in the eyes.

Two cases are recorded of an effect of this character created by the notes of a piano.

Each of the nerves are apt to copy the work the others can perform. Some of them can do several things at once—for instance, a nerve in the body is capable of assisting us to move, and at the same time giving us the sensations of heat and feeling. The sense of smell is an office which this agent, called electricity, performs, and it is but a sense of feeling. The difference of operation has only to be described to enable any one to see that these important offices of our existence are the work of this sly operator in nature, and the explanation shall be undertaken here. The existence of nerves in the mouth, tongue and nose is so well known, that their extent and character need not be described. The same discharge of an electric current is given out by these nerves as is given out by all the nerves at their terminations, and in these organs these currents are affected by the mag-

netic influence generated by the substances that come in contact with them. It is only a magnetic influence that an object exerts that gives us the sensations of taste or smell. In any other way such objects can produce mechanical effects only. The change that such objects undergo when in contact with these organs produces the magnetic influence that is operated by them. The change is only a partial decomposition of such substances. In this philosophy there will be seen still further evidence of the wisdom of our creation. The difference in the sensations of taste and smell is only in the extent of the effect of the substances such senses experience. The nerves of the tongue are more active than the nerves in the nose, and hence, a greater capacity for sensation in the tongue.

The taste of a thing, and the smell of a thing, are very different effects from mere mechanical effects, and any one can perceive both the mechanical and magnetic effects at the same time. In these operations of the electricity of the body we can obtain a means for the solution of the problems of chemistry, for it is in such kind of effects of the agent, electricity, that all chemical phenomenon can be observed. In another part of our work we will treat of the offices of electricity in chemical affairs. In the sensations of taste and smell there are but two effects produced by the substances tasted or smelt. The mechanical effect of such substances is not a part of the taste or smell. These effects are the absorbtion of the magnetic influence discharged by the organs of taste or smell, by the thing tasted or smelt, or an impartation of this influence to such organs, by such substances, and in these operations all the pleasures and displeasures of taste and smell are obtained. It is always one or the other, except when the substances are incapable of sufficient decomposition to produce an effect, as gold, and some other objects. In the stomach a similar philosophy is operated in the influences the substances taken into the stomach are capable of exerting. The food will impart to the body through the operations of digestion, and the branches of the pneumogastric nerve all its magnetic influence, and such substances as are capable of absorbing this influence from the body and digestive organs are sure to give us violent work in the stomach, and the other organs of the body. Such substances as attract the electric currents of the body when taken into the mouth, nose, or stomach, are usually called narcotics, and the narcotic effects are simply the absorbtion of these life-producing currents. This fact is easily established in the investigation of the effects of smoke of tobacco, or any other substance taken into the mouth. The carbon of the smoke instantly absorbs the electric currents thrown out by the tongue and mouth. In the absorbtion of this influence the brain becomes less active, for it is weakened by the loss of this influence. The increase of the saliva of the mouth is produced by the more rapid discharge of the magnetic currents of the tongue and mouth.

The stomach is rendered capable of discharging the gastric juices of its secretions in the same way. The food taken into the stomach, or mouth, attracts the currents of electricity from the nerves that terminate in these organs, and in their discharge from the walls of the stomach and the surface of the mouth and tongue these juices are released. The brain is affected in this operation in precisely the same way that it is affected in the use of tobacco by smoking. Every one will perceive the truth of this statement when they recollect how sleepy it makes them to eat a hearty meal. The effect of this kind produced by the food in the stomach is of no injury to the system, as the influences absorbed by the food is very soon allowed to pass to the blood, and over the entire body. In the use of tobacco it is all lost to the system. Now, cannot the medical profession discover from these facts, if they are facts, what possible benefit can be derived from the use of medicines, and can they not discover in every instance the very means of restoring the injured system to health? Can they not also discover the particular kinds of medicine that will accomplish the most in restoring an injured or diseased body? It is a plain path to pursue if it is a fact that the only effects of medicine are either the increase or depletion of the very influence that constructs the body. It is our opinion that an understanding of this philosophy is all the medical profession is needing to render its members capable of accomplishing the cure of every curable injury to the human or animal organizations.

We wish to repeat that the uses of medicine except in the few instances where mere

mechanical effects are wanted, are solely to increase or diminish the agent of life in the body.

There can be no other possible effect, and every injury of the system, and every benefit to the system effected by the use of medicine is produced by increasing, or diminishing, this agent in the body, either generally or in some organ of the body. Too great a reduction of this agent will produce death, and too great an increase of it will do the same. The cause of death by lightning is the effect of a great current of this agent discharged into the system instantly. It prevents all the operations of the currents of the body, and destroys a part of the organization.

Any surrounding body capable of absorbing this agent from the system will destroy the organization in time. Every fever is a result of the contraction of the channels for the discharge of this influence from the body, or organs.

The additional heat is the result of a greater combustion of the particles of the blood, and this always follows when the influence cannot be discharged from the body as fast as it is created. The blood will become depleted of its corpuscles, and when the great heat at the surface is gone, this depletion of corpuscles is as apparent as a patch of white paint on a black wall. The greater flush of the cheeks, or skin, in a period of fever is the burning of tissues at the surface of the body where this is seen.

In this work of destruction there is a most important design in our creation disclosed. The greater combustion of the body in cases of fever is confined almost entirely to the surfaces of the body and organs. This is possible, because the organs of digestion and circulation are constantly pressing the magnetic currents of the organs and body to the surface, and the combustion takes place where the force is crowded against the outer portions of the organs and body. If the tissues of the blood vessels, nerves, heart and other vital organs were burned to the extent that the tissues in the skin and the exterior of the body are, death would be quickly produced.

No one is destroyed by a fever if the strength of the body can be maintained until the greater accumulation of electricity in the body is able to force its way out, and it will always force itself out if the organs of digestion will furnish the substance for creating this agent in the blood till its force is sufficient to create an escape for itself.

The lungs are, alone, unable to increase this force in the body, and if the digestion of food is stopped the body will be destroyed by the creation of a combustion of the vital organs. The currents of the system will in this condition of the body apply their work to the organs on which life depends and destroy them.

In every case of death by fevers a decomposition of the vital organs of some extent can be discovered.

Now, if this is a correct explanation of the cause and effect of fever, does it not seem possible to alleviate or remove all such diseases?

It is possible, and the best means of doing it is to get the pores of the system open, and this can always be done in time, and in just the same way that the forces of nature open the pores of the earth, which allows the escape of electricity from the ground. It is, in this case, always accomplished by decomposing a part of the water on its surface, and then by the same means vibrating the water in the atmosphere and the atmosphere, too, producing what we call heat. This vibratory motion of these surrounding substances will always open the pores of the earth. This phenomena is always seen in the spring of the year. Now, a process of a similar character is sure to relieve a fever, and the warm vapor can be obtained from the tea kettle, and a cloth saturated with the kettle's contents will carry it to the body. So can the result be obtained by a good vapor bath. In every case of fever a perspiration from the body should be inaugurated. When this is done it is but a question of hours when the fever will be gone.

The work of repairing the system is merely the continuation of the process of growth All the injuries of the system, of whatever character, are removed, and the destroyed portions of the body rebuilt as it was originally built. The very same process is all that is necessary to crowd off the destroyed tissues and put new ones in their places. In this work a wisdom of creation is exhibited that is surprising when it is understood. Every scab on the surface of a sore is a well calculated prevention of further decomposition, and also a prevention of a spurious pro-

duction of growth. When a wound is inflicted on the body the dead tissues are partly decomposed and very rapidly, and the wasted portions of the tissues are allowed to settle down over the injury. This accumulation of partly decomposed tissues protects the wound from the decomposing effects of the atmosphere by excluding the atmosphere from the wound, and the operation of growth will supply the new tissues when this protection is afforded the work.

The creation of new tissues will cease when this scab is reached. The pressure of the scab is all that is necessary to accomplish this cessation of growth. The same operation takes place in the bones when they are injured, except that the skin, or membrane around the bone, performs the office of checking an illegitimate production of bone. When such preservers of the healing of wounds are absent, in most instances, the growth will continue until the ugly creations that look like goiters, or tumors, are created. They are often called proudflesh by the old lady nurse. These impudent growths are stopped finally by the interference of a skin that is created by the substances in the blood which creates the crust on our bodies which we have explained.

Could any one desire a more perfect or complete method of healing wounds? What a remarkable institution the human body is, is it not?

In the following chapter of this work we will undertake the solution of that problem we call the mind. In this work a still greater amount of curious arrangements of our organizations will be seen, and before the work of this wonderful agent of the Creator in our bodies is all described, and it will be but a small part that we shall disclose, the readers of this pamphlet will appreciate the good and wise author of all the works of nature more than they otherwise could.

CHAPTER IV.

In closing our last chapter on this subject, we promised to undertake the further solution of that "great problem," as it is called by the authors of science, the human mind. Before this task is proceeded with it is important that the work of this great agent of creation in the other organs than the brain be first discussed so far as it is our purpose to do so in this work. When this part of our work is completed we will apply ourselves to the solution of those very curious and important phenomena, the intellectual manifestations. Thus far we are without any explanation of what is termed the sense of feeling or touch. The sense is in no sense different from any of the other senses of the body except that it is an effect of a different kind of means of disturbing the electrical influence in the body. In each sense there is only an interference with the magnetic influence of one or more nerves. In the eyes it is a resistance to the discharge of electricity from the optic nerves by the influence thrown out by the objects seen. In the ears it is a vibration of the influences around the drum of the ear and in the auditory nerves. These motions of the current are produced by the vibrations of the atmosphere. In the nose it is the conflict of the magnetic influences discharged by the nerves of the nose with such currents as are discharged by the substances that give the sensation of smell. In the mouth and on the tongue it is a conflict of the same character between the electrical influence of such organs and those of the substances tasted. Now, the sense of touch, so called, is a conflict of the magnetic currents of the body, or organs of the body, with any solid body or other substance brought in contact with the body or organs.

The philosophy of all the senses are the same. It is the same agent in each case that carries a message to the brain, and in each case the sense is a sense of feeling only. These commonly disclosed operations of our nerves are but a small part of the senses they are constantly appreciating, and it is our purpose to disclose other senses of still nobler purport than any in the old catalogue of five.

The most exalting of all the senses is the one called love, and it is as clearly an electrical phenomenon as any of the so-called senses. The perceptions of ideas, the impressions called thoughts, are each of them as distinct sensations, or capacities for sensations, as any of the "original" five "gate-ways of knowledge."

The nerves of volition and those without sensation are capable of producing sensations in the brain as distinct from the five known senses as any of these five are to the others. The intelligence of every being, animal or human, is proportioned to the amount of the

capacity of its brain for sense or sensations. The nerves of volition and the nerves of involution are the very instruments for the transmission of sensation to the aura of the brain, and when it is seen what a curious work these nerves are performing the startled doctors will rejoice at the discovery. The doctors of medicine are willing the world shall have the benefit of all that can be discovered in the way of disease or medicine. They are only anxious to administer the remedies themselves. The one great office of the nerves of the brain is to create a graded and separated number of sensitive magnets, upon which all the capacities of a human mind can be operated. In all these folds of medula that constitute the human brain is to be found the complication of electric batteries that are producing every manifestation of intelligence that a human mind can manifest. The intellect or mind is but the electrical phenomena of all of these magnets. This hitherto unacknowledged fact is as capable of proof as any cause of phenomenon that is now admitted. All the proof actually necessary to establish this fact has been obtained again and again, and the fact would have been admitted long ago if the process of thinking could have been understood. In the heads of all animals of intelligence there is only the blood, bones and marrow. Now, when the electric current from a single artery or blood vessel in the brain is taken away from the brain, or any part of it, by any process, or if the flow of blood in such blood vessel is checked, the intelligence of the person will be diminished to the extent this current is destroyed, and the intelligence will invariably return when the blood is allowed to flow through these vessels again. A dog and bird have been subjects of experiments for establishing this fact by numerous investigations. In the diseases and injuries of persons, a chance to discover this truth has been frequently presented. In both the animal and human organizations this important truth has been discovered, and in no case where the experiment has been tried has it been found to be untrue that the mind or intellect depends on the existence in the brain of some influence the blood is capable of imparting to this organ. It is useless to point to the authors of such experiments, as the truth of this statement will not be denied by any reader of scientific works.

In addition to these experiments concerning the effect of the withdrawal of the blood from the brain, the experiments of disclosing the effect of electric currents on the brain of persons and animals have also been made, and upon dead bodies as well as those of the living organization. The result of such experiments on the organs or the brain in dead bodies of persons and animals are so well known as hardly to need repeating here. Every appearance of life and consciousness is produced in the dead organization by the mere transmission of a current of electricity through it. In many instances attempts at motion or of giving expression to a thought or emotion has been witnessed in the features of this partly resurrected condition of life. Now, if this wonderful agent of our lives can restore apparent life to the dead, and apparent consciousness as well, and if it can be seen that its withdrawal from the organizations of the living will destroy life, consciousness and intelligence just to the extent it is withdrawn, can it be doubted that in its operations in the brain, the entire philosophy or cause of the mind can be discovered? Can it be supposed that intelligence is created by any other element in our organizations? And when it is known—and it is well observed by teachers of science—that every production of thought or intelligence requires a certain amount of decomposition of the marrow of the brain, and that what is destroyed must be replaced before any further manifestation of mind can be made, or before the brain will evolve any considerable manifestations of intelligence, can it be doubted that on the existence of this *vice gerent* of the Creator in the brains of man and animals, the whole of the mind or intelligence depends.

If it is claimed that the intelligence is an institution, independent of the organization of the body or brain, and that the will is a force exerted by it, and capable of operating the body and its organs, what can it be? What possible contrivance within the scope of our imagination can operate our bodies and produce our intelligence? We think it is useless to claim any existence of this character.

If the mind is an independent creation, what is the character of its substance, and what its organization or form? To what extent is it connected with the body, and if connected, how? Why create a body that

would be useless without another creation to operate it? Why create a mind that cannot operate without another creation of an independent character to allow it to operate in or through? If the mind is an institution within us, capable of operating the body, and giving it the appearance of an intelligent being, what is the use of the second-hand disposition of the mind's capacities, why not allow this institution to make its own appearance and manifestations at once? If the mind is something created by a fiat of God, and for the purpose of affording life and intelligence to the human being, of what condition is it and to what extent does it exist in our beings, and in what manner? If it was impossible for the Almighty to create a man or an animal with capacities of mind and will, how could He create these qualities or faculties in any other institution any better? or how could He create them at all? Why create a man of flesh for the instrumentality of His fiat, when the fiat is more capacitated without the instrument?

All these suggestions are as well answered in the asking as they can be by any reply. No one is capable of replying to one of them with any reason, and it was the inability of the writer to answer them himself that led him to discover that no reply was necessary.

In our organizations all that is necessary to give us life and mind exists, and in man alone the capacity of mind can be augmented. Why is it that our intelligence can be increased if the capacity for its increase is not a part of our organizations? What can be added by man to a fiat of the Creator?

What can man do toward improving a thing that he does not understand, and which affords all the intelligence he possesses and operates all his faculties? It has only to be realized that the mind is but a description of objects stamped on the magnetic influence of the brain in order to complete the discussion of a problem on which the world has speculated for centuries, and on which a thousand volumes have been written.

The unwillingness of the men who are investigating the works of nature and those who are teaching the different theories of religion to accept a plain and simple solution of the problem of the mind, will not prevent the world from discovering a construction in the brain capable of affording this indispensable phenomenon of every organized creature. The fear that a solution of this question will establish the fact that a person is only a galvanic battery, and his mind only an electric phenomenon, will not prevent the truth becoming known. Every living creature is exactly this character of creation, and nothing more. The difference between any of the species of animals in respect to their intelligence, and the difference between any animal and man in this respect, is only in the amount of this good agent of the Common Father, upon their shoulders or in their heads, on which the influences of all the objects of creation are capable of creating impressions.

The most interesting and the most astonishing construction of organs in the system of a person or an animal is the complication of galvanic batteries that constitute the brain. No where in the operations of the universe can so wonderful and ingenious a plan of producing effects be discovered. The whole phenomenon of the human intellect is not more composed of wonders than are the means of producing such phenomenon. In the means for producing thought, and establishing a record of all that is impressed on the currents of the brain, there is all that will ever be discovered of the cause of intelligence.

No one is competent to construct so perfect and ingenious a means of creating intelligence, but the means is nevertheless capable of being understood, and it is our purpose to give an explanation of it if possible.

The evidence of the truth of what will be stated is to be found in the explanation we shall offer, and if it is not satisfactory, the reader will be pointed to the means of disclosing the truth himself.

The creation of the brain is in no sense different from the method of creating the marrow of the bones, or the cells of the same character in the nerves. The origin of all these centers of attraction shall be pointed out in the work we intend to publish in this paper on the question of the origin of species. The growth and manifestations of the organs, are all that we are concerned with in this work.

Now, when it is seen that a special faculty is given to each fold of medula in the brain, and that the extent and activity of each of these folds in the method adopted for decomposing them and producing an electric current, is the measure of the intellect they are

capable of exhibiting, is it not rational to suppose that in the current of electricity created by their decomposition, the means of causing an intellectual manifestation is to be found, as well as the measure of the manifestation? Is it not a fact that this influence is the sensitive plate on which are photographed the views of objects that are the subjects of thought? Is it not a fact that in these sensitive plates there is the whole philosophy for the possible impressions which the scientific thinkers of centuries past have looked for, and that these fields of electricity are the subjects and means of consciousness or mind? Is there any better kind of plate on which the objects of creation can impress themselves? Is there any better way to allow a creature to observe an object, or its form, character or use, than to give him this palladium of the most refined and sensitive influence ever created? and is there any better way for allowing a record of all possible impressions of such a nature than by stamping them on a substance that will give an impression, or a complete construction of the same character, on a condensing influence that is capable of ever exhibiting them again, and whenever they are wanted?

Of such an arrangement is the one in our heads, and in its operations are to be found our means of thinking, and the recording of all we think. In our chambers of records, called the ventricles of the brain, the impressions of all that we behold or discover by any of such thoughts and images of all objects of our experience are sure to be found whenever our brains are sufficiently excited. All those who have been at the point of death, and in fear of its realization, and those who have been excited by great danger or other causes of great emotions, will remember that in such moments a panorama of all their experience passed like the flash of lightning before their mental visions. All who have had this experience have been allowed a peep into the gallery of pictures which were created to afford them memory on earth, and intelligence and memory in the life to come.

A gallery of this character is in the brain of every person, and it is the source of their memory and the data of such things as they desire to recall. They are the archives of the character and conduct of the individual, and they are so well kept that every person is compelled to behold them in the future life.

The record of which the Bible speaks as being kept by the Creator, the chronology and record of His children, is the gallery we are describing.

Now, is it not an important, as well as most interesting disclosure, if true, that in our employment of the faculty of memory we resort to the gallery of stamps on a part of the creation of the soul itself? If this philosophy of memory is correct, have we not the best possible evidence of the existence of a soul?

If our minds are impressions upon the magnetic currents of the brain, are we not indebted to our own souls for all we remember? and are we not obliged to resort to it to get the data of what memory calls for? For what purpose is the record kept but for employment of this character, and a better employment in the life to come? It is all to be realized when the world has fully considered the truth of information contained in this article.

When all the declarations of the old Bible, or at least those it originally contained, are approached by an investigation of the works of the Creator, these declarations will be found to contain some important truth of which no explanation has been given the world; and it is perhaps a fact, that the scientific inquirer is as yet unable to disclose the foundations for a great many important declarations of the old authorities of the Jew and Christian.

That man has a record of all his acts, kept without his volition and beyond his control, is certain, and in its production in a future existence, whatever character that existence may be, will be discerned the grounds of the judgment passed upon him. In this judgment will be found a perfect adaptation of rewards and punishments.

The construction of this gallery is in a great measure like the construction of the vegetable forms in the frost on the window-pane, and on the crystals of the chemist's operations. The pictures of the latter character are far more important and wonderful than has ever been supposed, and their construction will receive our attention in the articles on the origin of species.

Now, how can a thought be created, and how can a copy of it be impressed on the condensing electricity of the brain? No more difficult problem presents itself to the scientific thinker, and it is the inability of the

mind to form an idea of the character of this work, that has so long allowed the statement to be made and be believed, that the mind is something independent of the physical organization. No one has ever supposed it could be only a manifestation of electrical operations in the brain, and hence, no search for such a cause has been made.

The impress of an object, or objects, on the magnetic influence of the brain, is in all respects the same as that witnessed in the act of photographing. The influence the object exerts is capable of influencing this aura around the brain.

The disturbance of this influence will produce a species of photograph on it, and the photograph will be stamped on the interior or ventricle of the brain, as the effect of the influence of an object on the electric field of the chemicals on the plate in the camera will be communicated to, and stamped on, the decomposing acids and chemicals on the plate. We can discover such pictures as are copied on the interior chambers of our brain, when they are lighted up by an increase of the current of the brain, as in moments of great excitement or emotions. When they are thus lighted up, the illumination will perform the same office of lighting, and in the same way that the membranes of the eye are lighted when the optic nerve is excited.

In each of our minds is a work of electrotyping as well. The will is capable of stamping any impression of the mind upon the mind of other persons, and it is accomplished by giving them a peep into the gallery of our own construction. This will take place when any one is in rappert or close magnetic relation with us. His magnetic currents will extend to this gallery and steal a sight of its pictures.

It often occurs that a person will observe what is in the mind of another when no expression of the idea is made, and one can realize the thoughts of another in this way frequently. Now, how can it be obtained if it is not a real picture of the idea that is observed by the mind of the other person observing it.

In each operation of this character the influence of our brain extends to that of another, and it is a union of such influences that gives this power to one person to understand the mind of another. Every species of magnetising or mind-reading is of this character. The way we obtain a glimpse of the thing we desire to remember, is by exciting our brains by effort of the nerves and muscles to such an extent as to cause an electric current of the brain to be created extensive enough to extend to the interior of this gallery, and when it is thus extended, we behold the data we are looking for. The wisest of men are only able to create greater galleries of such paintings in their heads, and their sizes are always the measures of their wisdom. What is more perfect than this arrangement for creating a record of our ideas or experiences? The way we imagine a thing to exist is by a consideration of some object, or set of objects, suggested to our consciousness, and when it is considered, we only construct a thing, or set of things, like the objects already impressed on the brain. It is only a calling up of objects already familiar to us, and in every instance the thing imagined will consist of one or more of the objects stamped on these galleries. We never imagine the sight of an object that is not composed of something we have seen—one or more objects.

Let those who believe that the mind is capable of conjuring up pictures of things never seen before, attempt to picture a thing in their minds that is not composed of such pictures as those of the objects which they have seen before.

The most perfect illustration of the truth of this peculiarity of our intellectual operations, is seen in the way a person can copy a work they have seen another person perform. No possible means of observing what is seen to be done by another could give one the power of copying it, if a picture of the work was not stamped on the brain in a way to enable us to observe it when copying the thing seen. The ability to design an object is the capacity of arranging a number of objects already in the mind into a new combination, and giving the brain a picture of this new creation. No part of the invention can be anything except what is already in the mind. Now, when we are sleeping the pictures of the galleries in our heads are partly illuminated, and the result is the discordant and senseless construction of ideas, or the objects of which the ideas were created. The reason why we can obtain a glimpse of these objects in our sleep is because the currents of the brain are augmented during sleep. The re-

pose of all the organs of the body allows an accumulation of the magnetic influence around the brain, and this additional amount of influence operates as the currents do that are generated by fear or great excitement. The force is augmented during sleep, because it is not employed in using the organs of the body. In our dreams the influence is sometimes able to bring us pictures of things we have never seen. This occurs when we are connected by currents of this good agent with the objects seen at such a time, and it is sometimes the case that we are thus connected with a very useful influence in the way of distant friends. Their influence, if united with ours, will be very sure to afford us a picture of such persons. This philosophy of the mind will in the future give us an opportunity of ascertaining what will be the best kind of pictures to hang on the walls of the immortal galleries, for in the further unfoldment of our capacities, a complete understanding of all these subtle operations of nature will be obtained. When it is obtained, we will be as careful to store our brains with good and wholesome paintings as we are now to store our cellars with good and wholesome food. The consequences of a bad record of our work in life will be the tophet prophecied for us, for every evil picture in these records of the children of God will be sure to cause a more appalling punishment than could be found in the use of a lake of ignited substance, for the punishment by fire would be of short duration, at most. The punishment following the consciousness of a life of selfishness and vice will be as enduring as the pictures of such work, every one of which will endure until eradicated by the creation of a more carefully prepared gallery of paintings.

Now, can we discover why the brain consists of several magnets instead of one, and why one organ can acquire ideas that another organ cannot? In other words, why these different batteries generate different ideas?

It would seem as though a pattern of ideas was applied to each of these folds of medula, and a thought cast for each one corresponding to the pattern.

No one is conscious of any difference in the character of these folds of the brain, and it has never been supposed that either of them could evolve a form of thought different from what the others could evolve. Therefore, the problem, when first considered, appears to be as difficult of examination as any thing given for our solution by the Creator can be. It shall, however, be examined, and it is our belief that it can be explained.

The twig of a tree is capable of illustrating the philosophy of this division of our faculties. In fact, this thing we call brain is but a copy of a twig in a better condition of existence. The cerebellum is capable of informing us of the character of our origin, except the derivation is a step in advance of the original. A perfect twig of the old spruce is seen in the base of the brain, and it fittingly tops out the spinal column. Now, in the other folds or leaves of the brain, the forms of the leaves or branches of this plant can be seen. Each bough is seen as distinctly as though the twig was actually there. In each bough a current of this etherial fluid is circulating, and it is discharged on the surface of this bough. Now, on this current is a picture of the decomposing medula under it, and when a greater object than this coil of medula is impressing this current, this creation of the decomposing medula will operate to cause the influence to copy a part of the leaf that is decomposing on the picture of the object that is influencing the current, and in this operation all the means is acquired of giving each organ a particular office of thinking, or thought-making. Each of these leaves are of a particular shape, and they are each of them in some degree different from any of the others, and particularly in their capacity for decomposition. The difference in their offices corresponds to the difference in their construction and means of generating a current of electricity. All of them are the mere instruments of the influence that circulates through them, and are decomposed in a short time. They are also re-built in a short time. Now, on the influence obtained by their decomposition, a chance is afforded to impress each current with what the circulation of the blood can impress them with. Every species of food we eat is capable of stamping its influence on these organs, and in this means of imparting to the brain the character of the substance we eat is to be found the cause of the difference in the lucidity of the thoughts the organs of the brain are capable of evolving. The organ called amativeness is the first re-

pository of the influence the animal food creates, and this influence is nothing more than the most active part of the magnetic current of the blood. The organ is simply excited by this charge from the blood, and the excitement produces the sensations of such a character as this organ is capable of acquiring. The locality of the organ affords the current a chance to excite it before the others are so greatly excited, and the nerves of the body carry the activity of this organ to the other parts of the system.

The organ called alimentiveness is affected in the same way, and it is the absence of such a kind of excitement that produces a desire for animal or exciting food. The nerves connect it with the organs of digestion and the glands of the mouth. The organ called combattiveness is only a capacity for exciting the whole muscular system, and the excitement is produced by the way the objects around us resist the desire to execute our wills. When the operations of the mind are thwarted by a resistance to muscular action by a person or object, the nerves of the muscles create a greater excitement of this fold of the brain and the influence of the organ when excited, is only exerted by the increase of the currents of this influence that gives our muscles activity.

The additional force thus obtained enables, if it be possible, the execution of the will. The organ called affirmativeness situated on the pinnacle of the head, is only a conduit medium for a constant coursing of the influence of the blood through the head, and is, therefore, always active to some extent. Its influence on the organs of the whole system is the keeping up of a constant iritation of all of them and a constant pushing of their operations. This constant pushing will continue the work of the individual whatever it may be, and it is of the greatest importance to the success of any person that this motor be allowed to push in the proper direction. If the pushing is in a wrong direction it will be sure to push the person into trouble.

The best organ in the head for us to consult is the one called veneration. It is the very organ that does most to light up that gallery of photographs in the center of the brain, and it is located directly over this gallery. The influence of this organ is solely to keep watch over the records of our acts and cause us to reflect on their character. and in this constant way of reminding us of the bad character of the pictures in this gallery, the reason is found for a person's constant reflection on the future life and the goodness of the Creator. The philosophy is very much like the conduct of the child that keeps one eye on its capers and the other on the frowns and smiles of its parent. The child always studies the attributes of its parents, and the child of God who is as willing as the little child of our bodies to cut up capers, is sure to study the attributes of its parent in the heavens when he is able to see the character of his capers. The organ of the force called causality is a very interesting affair, and it is located in exactly the same spot in reference to the human brain that the horns of the cow and other animals are grown from their brains.

The prying capacity of these organs is in some particulars the same as those of the horns of animals. The old cow that is dissatisfied with her pasture will often pry open a fence that she may obtain the contents of an adjoining field. The human being will use his organs of causality to pry open a problem that he may obtain the contents of the problem.

The use of these organs is solely to do this character of prying. The activity of the organ is produced by a current of electricity sweeping around these corners of the brain, and the activity is never great in the head of a person whose nerves and circulation are not active. The faculty of examining the causes of all operations that are observed is produced by the effect of the organs of seeing. The organs of causality are so closely connected with the optic organs that the effect of all objects of sight excite these prying organs, and an effort is only excited to see more. The exercise of the reason is only the effort of this part of the brain to extend the organs of sight. It may be well to add that this practice of trying to see more, will not be curtailed until the discovery is made that the Creator is limited in His own works, for man will continue to see more until all the works of the Creator on earth and in heaven are seen.

The great wisdom of the Creator will also be seen. The folly of those who think there is no such person will be seen, too. The most comprehensive of the organs in the human head is the one called human nature,

and it is a fact that it is the germ of the human being that is stamped on this fold of the brain. In its aspect can be seen the very picture of the animal from whose existence the human race known as the Anglo Saxon race was derived. The animal can be seen in the form of a profile crouched on the front of this fold, and its existence there is sure to be the cause of all the characteristics of the individual, for the animal nature of man is the same as the nature of the animal from whose existence he obtained his origin.

Every soul of the human family will carry this index of their origin into a world of still higher creations, and the influence of the animal will not be eradicated until the will of the Creator is executed, in creating from the incipient order of beings called a coral all the orders of animals of considerable size or above the insects, and including the human family. When creation is completed, and the forms of all creation are concluded and the universe becomes a scroll of the characters of creation, then and not till then will the human organization cease to bear the marks of its origin. This will take place when our Creator is wearied with the care and labor of perpetuating the existence of his works, and not before. The most curious of brain organs is, perhaps, the one that informs us of a condition of color in the objects we see. It is in that part of the brain at the corner of the eye where one point of the semicircle of vibrations of the optic nerve has a termination.

It is the one that can perceive the color of an object when the eye is open, and only when the eye is open can it be of use in this way. The halo created around the optic nerve by the influence of the nerve extends quite around the eye brows, and in this halo is to be detected the character of the color, size and form of an object seen, and these qualities of an object are detected by the character of the halo they create. When it is a light this halo will so excite these semicircular order of organs, then the eye brows will be excited and we frown, and wrinkle up the muscles over the eyes and try to drive away the disturbance.

In each of these organs the power to detect what is capable of being detected by them, depends solely on their size and activity. The locality of the organ enables it to accomplish the work of this character. The one at the corner of the eye brow is able to look on the colors produced by an object, and the one next to it is able to observe the size of the object, because it is in a position to observe it by the effect it produces. The one adjoining this is able to observe the form of the object, as it is situated, to be affected by every part of the object that affects the optic nerve. The uses of our eyes so far as sight is concerned, are only to create these effects. Beyond the excitement of these organs by the thing seen, there is no effect produced on the brain by the organs of sight. This faculty of observation is all performed on these three folds of the brain, and the organs for producing these effects are the eyes and optic nerves. The use of sight is to give us the size, color and form of objects seen. Emotions created by sight are the secondary effects of exciting these three organs.

Now, if we undertake to examine all the organs of the brain and explain their *modus operandi* of producing the manifestations of intelligence that they are capable of performing, it will only result in exhausting the patience of the reader, and it should be deferred until it is appropriate to continue such a work. The task shall all be performed in the future.

In our next article we will close the examination of the human body so far as it is affected by electricity, and in the article we will undertake the explanation of the wisdom of creation in what are known as the affections. In this part of the work of our old friend, electricity, we shall discover a more romantic operation of the influence than has ever been portrayed by the pen of the novelist or poet.

CHAPTER V.

The affections are a work of the agent called electricity, as much as the attraction of the magnet, and they are in every sense the same effects of this influence. The impossibility of a corpse to exert the offices of love and attraction is due to the fact that this agent is no longer creating a connection between such a mass of matter and other persons. In each organization of nature this influence is creating a relation of love between itself and other organizations. The honeysuckle as its germ approaches the ob-

ject around which it will twine or up which it will climb, teaches the human family what love is. The great vines that encircle the trees of the forest afford man other lessons in the philosophy of the affections. The cucumber vine as it chooses its companion and absorbs the magnetic influence of its choice, is a still better illustration of the power of electricity to create our affections. The assembling of the members of the vegetable species in groups or communities around the earth, is a work of the affections of plants. The assembling of the members of animal species in communities, is another manifestation of this agent in the way of creating affections.

The assembling of the members of the human orders of creation in communities is another and more extensive example of the operations of this influence in the cultivation of the affections.

The family circle is but another example of the same power, and only less extensive, and the attachment of one person to another is but a still narrower exhibition of this godlike influence in the creation of the qualification of love. Throughout all nature this law of love is manifest.

In all bodies on earth and in the sky, in the dew spangled leaflet and flower, and in the valley and in the mountain, in mortals and animals, and in all the operations of the universe is this ever present principle of love and of creation to be seen. In our persons when they are in a normal condition, there is an influence exerted by this agent that causes all other persons around us to either like or dislike us.

This influence is sure to give us a sensation of some kind that causes us to like or dislike the person or persons near us.

It is always felt as a pleasant or unpleasant influence and in the feeling we experience, there is all we can discover of the affections. It is simply the good influence people exert on our organizations that make us feel that we are in love with them. In every organization this feeling can be experienced to some extent, and the plant is no exception to the rule.

Now, what is this phenomenon? What is it that makes us feel that we must approach a person we are attached to, and what is the manner of exerting the power of the magnetic influence of bodies that enables all the manifestations of affection to take place? This philosophy is as capable of examination as any other, and it is our purpose to attempt it.

The only explanation we have thus far obtained from the physiologist is the idea that in the appearance of a person we find something that effects our emotions, and excites our affections, and the affections are supposed to be a sort of rapture of the senses. The creation of attachments for the opposite sex—in the male sex—is considered the result of the beauty and qualifications of the female, and a result of strength and manliness on the part of males when the qualification of love obtained by females. This explanation is of no consequence, for it does not disclose any operation of any influence capable of exciting the affections. The most beautiful office of maternity is the influence of the child on the conduct of the mother, and the reciprocal influence of the mother on the conduct of the child. This office is performed by and through the action of our magnetic currents in every instance of the creation of offspring in either persons or animals, where the operation is not interfered with by some influence which destroys the work of electricity in the mother and offspring. In every condition of life this capacity of the affections is assured by the way the offspring is brought into existence. The human offspring is no better provided for in the affections of the mother than the offspring of animals, and one of the most wonderful of all creations, the old hen, is as well qualified to understand why she loves her chicks and what their origin is as the great* Couvier or any scientist of great fame. This curious creature will hatch out bone and muscle and feathers, and life and consciousness from a small body of protoplasm and carbon. She will also create a mud turtle from a small amount of the same substances. She can also find affection for the little turtles as well as her own representatives. She is capable of giving protection to her brood when her ability for defence is insufficient, by placing her chicks in a corner that is not discovered by her enemies, and is able to find food for all her family, although more numerous than that of any other animal. Now, what disposition of this agent called electricity is made in order that all the creatures of the

* A. Couvier was a French naturalist.

living world may have affection for each other and care for their young? This inquiry is so important that it should be answered if possible.

On this disposition of the agent depends all our pleasures and all the assistance we can obtain from our fellow-mortals.

It is a fact that every pleasure is only a work of this good agent in our bodies. It is the same influence that produces the pleasant sensation, the pleasant emotion, the pleasant kiss, the pleasant smile, and the delightful affections.

The most common manifestion of this agent in the nature of affection is the exchange of a kiss, and in the cause of this funny operation is to be found the entire philosophy of the affections, and the character of the disposition made of this good agent of creation in this department of its work. The teeth are constructions of the nerves that terminate in them, and of course in each tooth there is a constant discharge of electricity in all directions, and this influence in escaping from the teeth of the male portion of humanity builds up the tulips of hair under the noses of this stalwart sex and also the whiskers, of these wonders of creation. On the faces of ladies this adornment is omitted in order to allow them to exhibit handsomer faces. The nerves of the face in women are too small to build up whiskers, except a few cases.

Now, in discharging these currents of this very important influence from the face over the rows of teeth, these nerves entice the co-operation of the opposite sex in creating these funny phenomena called kissing. As sure as the co-operation is granted the currents will be exchanged, and a very pleasant influence is the result. No one can know just what it is until it is felt, and when it is felt the experiment is usually attempted again. When in the condition for creating a constant union of such currents, both sexes are apt to cultivate this exchange of electricity, and the consummation of the will of God is thereby obtained.

Every child on earth owes its existence to an exchange of the magnetic influence of the mother and father. In this most important fact the teachers of the gospel can rely for the acceptance of the claim of the devine character of Christ. No person can deny this claim, for it is possible for one to discover in the future that this agent of all creations is capable of inaugurating life in the wombs of all the creations of God. No other agent was ever employed, and it is precisely the same operation that takes place in the germination of the seed in the earth. In the womb of the earth there is a current of electricity which inaugurates the commencement of life in a plant, and it is only a commencement of the decomposition of the seed that takes place when the development is begun. The decomposed matter is thrown to the surface of the earth as our hairs are thrown out of the blood over the marrow in our bones. In our own creation, and embryotic development, the same process takes place, and the magnetic influence of the mother is the force that continues the development of the offspring. The provision made by the Creator for the assurance of the love of the mother for her child, is simply to allow the offspring to be created in her own body. The working of this arrangement is so perfect that every child is guaranteed the care and fondness of its mother. In our infancy and helpless years this most important provision for our nurture and protection is the thing that gives us our devotion to the mother of our beings.

The magnetic relations of the mother and child, which no power on earth can sever, are created first by the character of our creation, and secondly, by the influence operating between the infant and mother during the period of infancy and childhood of the offspring.

Now, for each animal species this same arrangement is provided, except in the cases of the creatures that hatch their young from eggs, and with those whose offsprings are the hatchlings of eggs the same character of relation is established between the mother and offspring by the method adopted for the hatching of the offspring. Only a repetition of the method employed for the production of life in the whole creation of animals is performed in the production of human beings. Therefore, in the treatment of our domestic animals, should we not have some compassion for them, as we see the Creator gave them an equally respectable method of coming into the world?

The affection of the cow for her calf and the old hen's love for her chicks are as pure as the love of a human being; so is the love of a tiger or bear for its offspring. No greater

wisdom is anywhere observed in the works of creation than the way the children of the Creator are compelled to multiply and fill the earth with their kindred, and to care for the helpless and constantly begotten children.

These duties are rendered a pleasure, and they are induced only by the law of love. What a comment on the wisdom of creation is the fact that we are able to see that all the duties that man is obliged to perform in the vineyard of the Almighty are a pleasure instead of a sorrow.

Now, in this philosophy of the affections we can learn still other important lessons. We have stated that all our pleasures and pleasurable emotions are produced by the influence of the agent electricity in our bodies. It is a fact that on the existence of this influence in our systems every pleasure depends, and on its absence every sorrow and pain depends.

The way is open for us to discover that by filling our bodies with this agent we can be well, strong, and happy, and that to the extent it is absent we will be sick, weak, and unhappy.

The pleasure of good health is the effect of the influence of this agent when a great amount of it is coursing the avenues of its circulation. The possession of great strength by the muscles and nerves is only the possession of a great amount of this agent of life and motion in such organs.

The happiness any one enjoys is only a pleasure produced by the general effect or emotion of this same influence. The pleasures of the passions, no matter what they are, are only a more exciting operation of this influence in the organs of the body. The pleasures of passions or the pleasures of the emotions of the mind, and the enjoyment of robust health, and the pleasure of the acceptance of the love of others, are all but modifications of the pleasant effects of this agent.

The pains of the body or organs, the sorrows of the mind, are but the effects of the absence of this good influence in the organs of the brain and body. In its coursing through the body the most beautiful results are experienced, and in its exclusion from the body the most painful and wretched consequences occur. In every hurt this agent is simply driven from its domain. It is the disturbance of this current that produces the hurt, and just to the extent it is divested of its possessions will we experience pain. No one can get hurt without putting this agent out of possession of the part of the system in which the pain is felt. When it is out, the part that is deprived of it is incapable of feeling.

Now, in the brain this agent is capable of causing pain in the same way. In each spasm of the hysteric, this agent is simply absent from the brain, and it is its absence that creates the torture under which the victim struggles, and exercises the muscles. The contraction of the muscles is an effort to supply the brain with what is wanted. The pain of the mind and the contortions will cease when this influence is allowed to accumulate in the brain.

It can therefore be seen that whatever will unduly excite the brain will cause a feeling of sorrow and wretchedness. It may be grief or it may be vices or crimes that so agitate this organ as to cause it to lose this agent. The result is always the same. The absence of this influence is produced by the excitement created by either of these causes of excitement.

The constant apprehension of punishment on the part of a criminal, and the excitement of his brain by a moment's reflection upon the wrong he has done, will deprive him of what will give him contentment and pleasure and a proper condition of relation to the human family.

It is to acquire a condition of quiet, by which his system may be filled by an influence he feels is wanted, that the murderer will confess his guilt and surrender himself to the officers of the law. The father and mother who lose their children are so excited over the loss of a production of their affections that they become weak and partly out of health.

The good agent of creation is simply thrown out of their systems. The mourner either desires to be relieved of sorrow by death or by some occupation that will give the mind repose by directing it away from the subject of the excitement.

The influence we call electricity is the veritable agent of the Creator, and it is connected with all the affairs of His creating. The influence surely connects us with Him, and when it is out of our persons our relations with Him cease. Just to the extent that our bodies are deprived of this *vice gerent* of the Almighty are we out of a proper relation with the Author of our existence. There is not a

person of any intelligence in the world who does not realize the fact that when they are sick or exhausted from any cause, they are conscious of an inharmonious relation of themselves with their Creator. They feel that the continuity of an influence which extends from them to this Being is broken, and that they can be neither happy nor well until their bodies have acquired some kind of influence that places them in a proper relation with Him.

Every soul is connected with the Maker of the universe by this agent of the will of both this Maker and the whole creation of animal and human beings.

In this relation, if it is all that is designed, there is both joy and peace. In its destruction, only darkness and misery can be felt, and in this fact is to be found all of the methods of punishment and rewards ordained by the Author of all such creations. On this system of punishments and rewards, a perfect adaptation of rewards and punishments is sure to be made, a punishment is sure to follow the wrongdoer, and a reward is just as certain to come to the one who deserves it.

It was the absence of this good and cheering agent of the works of nature in the person of the Prophet of Galilee that caused him, when crucified, to exclaim that his Father had forsaken him and to inquire why it was. The toil in climbing the hill of Calvary, and the barbarous torments of the rabble that followed, so paralyzed this delicate organization, by driving out of it every part of the influence of life and strength it had possessed, the most he could feel was that his Father had severed his relations with him.

The slight reaction on the cross, when the fury of the mob was spent, enabled him to appreciate the repentance of the thief at his side, and to cheer him with a promise of life.

So it was in the case of all those who have perished in the defence of what they believed to be true. Their God seemed to forsake them in their hour of horror and death.

At this period of our existence the world can understand that sacrifices of such a character do not appease the wrath of God, and people to-day do not want to exhibit any more gibbets to the Almighty than are necessary. There are already so many pictures of them on the souls of the desecrated and hapless authors of cruelty whose lives are spent, that it is their most earnest of all desires to wash them out. Man has yet to discover, however, what the real office of life is, and in this day the wisest of men are the marks of envy, malice and spite by almost the entire community.

The most useful of men are those who can perform valuable work for a community, and display only charity as an associate of their minds. The moment it is seen that a spark of talent is exhibited beyond what is seen in any one, the hostility of the members of society will be awakened to a greater or lesser extent.

No moment can afterwards elapse that is not occupied by the meanest of creations, a jealous mind, in stabbing the character of the possessor of talent.

So also is the possession of wealth the object of hatred and jealousy; the fawning creatures that cling to the skirts of such as are wealthy are only the best possible witnesses of their inability to be anything themselves. Such a fact would not be more evident if all the crawlers after the honey-comb of popularity or the company of the wealthy were mere photographs attached to the skirts of those they crawl after.

This closes our comments on the subject of electricity in the human body.

OFFICES OF

ELECTRICITY IN THE GROWTH OF PLANTS.

CHAPTER I.

Next to the development of the animal and human races, the development of the vegetable kingdom is the most complicated and interesting work of creation. In the term vegetable kingdom we include every organization the growth of which depends upon the influence in the earth, and which is attached to the earth in its germination and growth. The separation of natural organizations of growth from the soil or earth is the only actual distinction between the plant and animal, except what is seen in the character of their development. The plant is dependent on the earth for its substance of growth and for a force of construction. The animal is dependent on a force generated within its organization for its construction and the means of getting its food, and it is fed by a condition of substance of which the vegetable and animal are parts. An animal can paddle its own canoe, while a plant is allowed but little latitude to disclose its power of motion. In the more complete development of the animal the manifestations of the power of will are observed. In the human organization it is still more observed. Except in the degree of development, and the way a power of construction is obtained, there is no difference between a plant and an animal.

The plant is organized matter, and its force of construction and motion is the influence called electricity. The animal is only organized substance with a greater opportunity for the manifestation of this influence. No order of organizations is anything more. There are always two things employed by each, and these two things are matter and magnetic currents.

In both plants and animals there are only elements of prepared substance of the same construction and use. The development of either the plant or animal is but an appropriation of these prepared atoms to the construction of these creations. In each of these organizations, the appropriation of these atoms is the process of growth. The plant is the organization originally conconstructed, and every other organization possessing life is created from what is produced in the growth of the plant. No animal is created from such matter as is in the earth in an unorganized state, while every plant is. All vegetable creations, the most perfect no less so, are original organizations from unorganized substance obtained from the earth.

The most degraded of the animal kingdom is the creation from what is prepared by the vegetable. The human organization is also a production from the vegetable, but it is another evolution of what plants are able to evolve. This philosophy is the one we intend to discuss when we have completed the examination of the development of plants and the earth.

The smallest of plants are a beginning of animal existence and so are many of the largest. The highest form of animal, man, is an ultimate of a plants existence. The very method of developing plants is copied in the development of the animal and human organizations. In each part of a plant is a circulation of the fluid that results in the growth of the plant, and in all animals of any organization this character of circulation is employed, and in the growth of both plants and animals there is only a crowding of substance to the surface of the organization.

How well an original method of development of organizations is continued in the unfoldment of all nature, is partly seen in the correspondence of the development of plants to the development of animals.

No one can understand what a perfect analogy exists in the operations of nature, until it is actually observed. The most general methods are never abandoned until they are utterly impracticable, and the one that is adopted in place of the one abandoned

is also repeated till it becomes impracticable. The wise Creator of all nature is yet to be given credit for more wisdom than is now accorded Him. No mortal is able to fathom the devices of nature, and an eternity of time will be necessary to complete the work of studying the affairs of creation. No wisdom is sufficient to disclose the complete *modus operandi* of the development of the things of our world. It is only a glimpse at most that man can obtain of these wonders. The general operations of law are discoverable, and a part of the more detailed or minute operations. The laboratory of the more subtle works of our own construction, and of all organizations on earth is the ever enticing field of the investigator, and it will keep him employed as long as there are any such beings on earth.

It is only to give a description of the more general features of the production of the vegetable kingdom, and a glimpse of the more subtle operations that take place in the development of this department of nature that this work is intended. In each statement that is made, only a proposition is intended, and it is only desired that a consideration of such a proposition will be given it by the reader. In all the present works on the wonders of creation, there is but a limited and imperfect delineation of the operations of law.

In our own descriptions of such phenomena, there will be but little more, and perhaps they will contain a greater amount of mistakes.

The most complete theory of the creation of anything that the human mind can establish will only contain a part of the truth, and will always contain some error.

The absence of the truth will be caused by overlooking many of the facts of the subject of inquiry. The errors will be caused by a want of knowledge of the facts considered. In this examination of the vegetable kingdom, we will try and observe as many facts of importance as possible, and we will try and avoid making any serious errors.

The present theories of the development of plants, are not, in our opinion correct. In fact, all of them are now brought in question by the teachers of science; the theory of growth now accepted, is, in our opinion, particularly erroneous. The theory of the reproduction of the vegetable species seems to us to be quite as erroneous. The germination of plants is also incorrectly explained according to our understanding of this operation. An explanation of the unfolding of the leaves, flowers and fruit of plants is scarcely attempted, and whatever explanation is offered is incorrect, we believe. All classes of plants which are sometimes called animals or zoophites and corals, and species of polypus, and the many fibrous growths called mineral constructions, are to be taken into account in our investigation of the world of vegetable organizations. The most common idea concerning the growth of a plant is that its foliage absorbs moisture, gases and carbon from the atmosphere, and that it is possible for such an organization to grow by obtaining the substance of growth in this manner. The common idea of the manner of the reproduction of the species of plants, is that a plant is impregnated by the pollen of its blossom, or by the pollen from another plant. The only explanation of the development of leaves, blossoms and fruit, is that the absorption of matter from the atmosphere enables the plant to deposit on the extremities, of its branches or roots, the leaves, blossoms and fruit, or the creations at the base of the plant. No explanation of the origin of the different species of plants is offered, except in the later speculations of investigators of science. These speculations are as useless, in our opinion, as the other theories of plant development, and they are of little more value in the minds of those who advance them. These theories are only a claim that climate operates to create all the differences in plants.

Now, in commencing the description of this work of nature, it will be necessary to examine the character of the force that builds up these important organizations. If the force that accomplishes this work can be discovered, it is possible, we think, to learn how the work is performed.

The first thing that attracts the mind of the investigator while looking for this force, is the fact that all plants grow toward the sky, and the next thing that calls for attention is the fact that none grow where the earth is bound perpetually by ice and snow; and that in the latitudes where there is no cold or snow, the growth of plants is greatest.

If it is some force discharged by the earth

that produces the growth of the plant, it would follow, as a matter of course, that the plant would increase in the direction this force is extended.

If the influence the earth discharges is thrown outward from all parts of the earth's surface where it is discharged, the organizations on the earth that are constructed by such a power would unfold in the direction of the flow of this influence, and the creation accomplished by such influence would present a condition of development that would disclose the character and direction of the influence.

It is also a fact that if the production of vegetable organizations are the result of some force of the earth extended in the direction of their growth, the earth cannot produce such creations where this force is not discharged.

The production of all such organizations would be limited to the parts of the earth where such force is thrown out. Now, if it is a current of electricity that is discharged by the earth that is producing the vegetable order of productions on the earth's surface, we must admit that this current is not discharged from that part of the earth's surface, where the contraction of the surface is as great as it is in the coldest parts of the earth, and we can easily discover that a condition of cold like that that exists in the frigid zones (where plants do not grow), is capable of preventing such a discharge of the magnetic currents of the earth, for when it is winter in our own latitude, all growth of vegetation ceases. No further growth is possible until the cold is removed and the surface of the earth is opened by the influence of heat. The growth of a plant is continued till it is matured, if the earth is kept opened.

The most of plants are capable of continuing their development until matured in the climates in which they exist, but is ordained that the plants necessary for food of man and animals, shall accomplish their growth in a season. And when it is not accomplished, it is always the result of the contraction of the earth's surface by the influence of cold, or by the contraction of the plant itself. Every species of plant that is capable of surviving a winter season, will discontinue its development in proportion to the absence of the force the earth discharges. Now, it is easy to discover whether it is electricity thrown out by the earth that is giving us our vegetables and producing all the forests and other flora of the globe, for in its operations there are abundant means for detecting its existence and influence. Every plant will be sure to disclose its presence when it is examined for the purpose of ascertaining the presence of this agent. Different scientific investigators have already found that this subtle influence circulates in all plants.

The office of its existence in this character of organizations seems to have been overlooked, and the theory of growth is as yet so little understood that it has not occurred to the minds of such investigators that it is this influence in all organizations that produces growth. In the works upon these subjects the investigation of the growth of stumps for a long period after the tree is cut off, is to be found. The growth of the stump of a pine tree was found to continue for several years, and a growth of a fir stump was discovered, which also continued for some years. Every one has witnessed the growth of twigs on the stumps of nearly every kind of tree. The production of such growths of course are not the result of absorbing of substance by leaves or branches, and the continuation of such growth shows conclusively that some influence other than the effect of the absorption by foliage is the cause. Now, if it is possible for a plant to continue its growth when its branches and trunk is cut off, is it not reasonable to suppose it derives its substance and the influence of its further construction from the earth?

Tho only escape from such a conclusion is a willingness to overlook the most competent evidence of the fact. This character of evidence is but a small portion of what we shall point to, to sustain the proposition that a current of electricity discharged by the earth produces all the development of a plant.

Perhaps the method of unfoldment, if understood, will convince all who examine it that it is this current alone that affords the clothing of the earth in the shape of forests and all the orders of vegetation. No better argument can be offered than a simple delineation of the process of growth in such creations.

It ought, however, to be stated in advance

of such a delineation, that from the surface and extremities of all plants a constant flow of this agent of creation is taking place. In some plants its escape is so rapid as to produce shocks to the arm and body of a person touching the plant. In others, some flowers for instance, the escape of this influence will produce a light visible in the dark. In the decomposition of plants a similar light is produced, often called the *ignus-fatuus*. Every plant is only decomposed when this influence is released from every part of its substance. Its decomposition is a work created by the escape of this agent from the corpuscles and tissues of the plant. The laborious Faraday discovered that every substance contained just enough electricity to decompose it, and that the decomposition ceased when this influence could escape no longer. Besides, this evidence of the existence of electricity in plants and the circulation of its currents through them, all the productions of growth in a plant are exudations from the channels of circulation of the plant. No part of the growth of a plant is constructed by an accretion of substance on its sides or extremities from external substances. It is never the case that any production of the plant is an application of matter to it from the atmosphere or from any other source than through its channels of circulation. The bark, twig, leaves and blossoms, and fruit on such plants as bear fruit, are always created from what the plant throws out from its channels of escape of the influence that produces it. When this fact is so obvious to all who have ever seen the plant in itsgrowth, it is quite impossible to find any excuse for the hypothesis that the growth of these objects are the result of an absorption of sub stance through the leaves or blossoms of these organizations.

This fact is as well observed as the fact that animals acquire their growth from the substance they eat, and that it is by some process appropriated to the increase or repair of their bodies, and by being carried to the surface of their organs and bodies from the blood. The very process of growth in animals is but a repetition of the process of growth in plants, except that the substance of the growth of plants is obtained from the soil in which they are germinated.

Now, it is not appropriate to this article to give all the evidence of the fact that the earth is a great magnet capable of generating and throwing out an electric current wherever it is opened by the warm influence of the sun, and the evidence of this most important fact, except what is necessary to afford an understanding of the power that operates to produce the development or growth of the vegetable kingdom, must be delayed until it is competent to disclose the philosophy of the creation of our islands, continents, mountains, and other upheavals on the earth's surface by this force. In such a work all the evidence it is possible to discover of the employment of this agent, in such great operations and commotions and its actual evolution from the earth's interior will be offered. When it is offered the fact will appear, and in no sense a surprising one, that the production of the vegetables on the earth's surface is but a result of the still active operation of the influence that produced these more extensive productions.

The origin of the several species of plants is the inquiry that should be first investigated, in our attempt to describe the creation of plants.

No explanation of this problem is now in the possession of the world of investigators, that is entitled to be considered an explanation. Only the cause of differences in appearance of the same species is understood, and this cause is simply unraveled to the extent of disclosing the fact that the difference in the temperature of the atmosphere at different parts and elevations of the earth's surface is the cause of these differences of plant species. If the whole explanation of the effect of temperature on the development of plants was given, or the whole cause understood, it would be possible for any one understanding it to discover the origin of the earlier species. Another false conception of the development of a species of natural organizations has contributed greatly to prevent the solution of this problem. The theory of the construction of corals and the reefs and islands of these primitive organizations. From these earliest of the plant creations every species of plants on the earth have been derived. The difference in the development of these coral organizations has led to all the difference in the species of the vegetable kingdom, except such as is the result of difference in temperature and soil. The difference in the develop-

ment of the coral was also an effect of difference in the temperature of the medium in which they were produced, and of a difference in the soil or the bed of the ocean. The effect of the difference in the temperature of the surrounding mediums of water or atmosphere upon both the coral and plant of any kind, was and is to create a difference in the rapidity of the growth or development of these organizations. Every degree of difference of temperature is sure to be manifest in the development of any character of plant, for an increase of growth is the result of a greater amount of heat, and the opposite effect is always the result of a decrease of heat. On the slopes of every high mountain in the torrid zone all the varieties of plants on the surface of the earth can be found, and these different varieties are found in the same temperature on the slopes of these mountains that they are grown in, in the other latitudes of the earth.

The same temperature and soil produce the same plants, whether on the mountain slopes of the equatorial portion of the globe or on the surface of other parts of the earth. The corals of the different zones are as widely different as the species of trees in the forests, and in each portion of the coral productions there are as many kinds of growth. Now when this statement is read, all who read it will exclaim that corals are the productions of insects or polypes, and they will also say that it is impossible for the climate or temperature of water to make any difference in their appearance, and all who say this will not attempt to discover the fact that if they are made by insects there could be no difference in their appearance.

Now, the coral is grown precisely as a tree is grown, so far as it is given an organization. Its organization is the same so far as it is extended. The extension of its organization is limited by the character of the matter of which it is constructed. In each coral the channels of circulation are identical with those of a plant to the extent that they exist in this species of organization. It has tissues and cells as plants and animals have, and they are constructed in the same manner. The very work of construction is the same as in the production of our hair and bones. No wiser philosophy of construction is required in the growth of a common shrub than is employed in the growth of a coral. Now, when it is seen that the plants in each part of the earth correspond to the construction of the corals of such parts, it can be contemplated that the origin of such plants are to be found in the existence and development of the corals.

All of the trees of our forests are but similar constructions to what is seen in the coral of some waters, and are but continuations of the development of this species of organizations.

Their substance is but a more carefully prepared amount of matter. Their greater sizes are the result of the existence of a greater amount of substance capable of being appropriated to such creations. Their greater beauty is the product of the greater amount and better condition of matter of which they are composed. Like the more admired species of animals, they are more beautiful as the substance of their construction is more refined, and more capable of better appropriation. It is only a mere difference of form and condition of substance between the flinty and calcarious coral and the pine or the palm tree. It is also a fact that in the more stubborn condition of the coral there is a good compensation for its want of grace and beauty, for it can withstand the tides and waves of the ocean, as well as the pine or hemlock can withstand the blasts of winter or the storms and winds of the other seasons. Both organizations are appropriate to the elements in which they exist. In the more crude condition of the coral, there is a better opportunity to examine the philosophy of growth employed in all organizations of plants or animals, for not only is it the same philsophy of growth in the coral to a great extent, but the coarser construction of this creation admits of its being observed better. Let those who are surprised at this contradiction of the old theory of the development of corals, be sure to examine one of them with a common magnifying-glass, and also a species of plant of any description that is not full of sap, and also an engraving of the organs of our lungs, kidneys and channels of circulation. It is but a moment's work to become satisfied that all these creations are produced by the same philosophy of growth. In each of these constructions the same kind of tissue, cells and means or channels of circulation for the substance of growth can be seen. All of them are but the work of this one great construc-

tion in all nature, which we call electricity.

Now, if this is correct, and it can easily be demonstrated, is it not possible to ascertain what the process was that produced the coral and the plant, and what now produces them, and how the current could conduct their substances from the earth to every part of their organizations? Can we not feel a little surprised that a theory of coral growth by insects of this name has been so long accepted. Teachers of science are even now attempting the solution of this problem by other methods of reasoning than the one that assumes a construction of our continents and islands by a mere insect.

Of course, it is not possible for us in this paper to afford the reader the pictures of all the different-shaped corals, or of all the different-shaped plants or organs of animal bodies, but it is easy to obtain them in any book store or library, and the reader is asked to take that trouble. If our work is an error, we will show a willingness to acknowledge it if the error is correctly pointed out.

The constructions of corals was the first creations of the earth, when the surface of the earth was covered with water.

At such a period of the earth, the water being extended quite over it, the depth of the water was the same as that where corals are produced now, and it is well known that the coral reefs and islands are not discovered except in proximity to the shores of continents and islands which are but coral growths. If the water is too deep the weight and other influence of the water will arrest the discharge of the earth's magnetic currents. The effect of such arrest of the operations of the currents of this force or the prevention of its discharge from the earth under the water is to prevent a coral development.

A surprising amount of effects of the great depths of water is yet to be observed. The growth of coral mountains of course, divided the water of the earth and created a difference in its depth. The wonderful operations called volcanoes, earthquakes, and the rising and sinking of islands and continents, are all due to the influence the oceans exert on the currents of electricity in the earth. So are the ocean currents all produced by the ability of the water to create a different direction of such currents from what they would otherwise pursue. This work shall receive our attention in the further publications of this paper.

The uses of electricity in all these phenomena are of such vast extent and importance, that it will be of interest to every reader of science to have the evidence of its work. It shall be offered in this publication in the future, so far as it is in our power to furnish it. On the shores of all continents the coral is found, and coral reefs and islands are also observed where the water of the oceans are of no considerable depth. On the shallow shores of the equatorial portions of the earth, they are more plenty. In this important fact we obtain a glimpse of the actual construction of continents, and the causes of the greater amount of land surface of the globe at the equator and at points about half way between the equator and the poles, and the fact that there is no land at the poles is entirely explained by a knowledge of the cause of the construction of the continents and coral reefs.

The magnetic currents of the earth are thrown out only around such parts of it as the warm atmosphere and water opens. In ages past it was opened quite to the poles, and in such a condition of the earth it was possible to create the continents around the poles. Since that period the growth of continents and islands has been confined to the more central parts of the globe, and in the production of all that is now out of the water, the influence discharged by the earth has been the constructing agent. The very condition of the land surface of the globe at the equator furnishes abundant proof of this great system of constructing continents. At the equator a great amount of land surface is seen, and the depths of the ocean in the region between the eastern and western hemispheres is owing to the driving of the waters of the earth into these channels by the creation of the land at the equator. If it was not for this great system of producing the continents and islands the water of the earth would extend quite over the whole globe to-day. The difference in the width of our continent and the continents of Europe and Asia at points about thirty-five degrees from the equator, and at forty or fifty degrees, is due to the effect of the crowding of the water away from the equator when the land at the equator was thrust out of the water, and in this

condition of water between the equator, or where the surface of land terminated and the surface of land near the poles, it was impossible for the land to be increased except by a continuation of its production north and south from what was created at the Equator and on the south of the arctic land surface.

The continent of South America was extended towards the South Pole in the same way that the North American continent was was extended toward the Equator. What a glorious object of the creation of these vast orders of land; it actually seems as though the author of the world was at the work himself.

Now, in the Eastern continent we see the same character of the development of land surface, and there is considerable similarity in the result. Europe and Asia answers to North America and Africa to South America. The islands of the Indian Ocean are coral constructions, and the great island of Australia and all the islands of Polynesia are of this nature.

In each one of these continents and islands the evidence of all that is now stated can be seen. In the construction of the mountains, or mountain ranges, on every continent or island we behold only a great dyke created by the great power of nature on account of the great depth of water on the coast of each body of land, and these dykes are the preventives of the destruction of the land by the ceaseless maw of the waves of the oceans. Every range of mountains on earth has been created since the continents and islands that possess mountains were created. In every part of the globe where the waves and ocean currents were insufficient to destroy the construction of the land as fast as it was created no very high range of mountains can be discovered, as in Australia or the East Indies, and in the later construction of all continents.

Let us now return to the growth of these earliest plants, corals, and when a little farther examination of their character is made we can commence the examination of the *modus operandi* of development.

The substance called granite is a production of these corals that established the basis of all continents. It is only pulverized and partly decomposed coral. In every piece of granite a portion of the corals that once constituted the surface of our continent can be seen. In every atom of soil, and in every atom of any other matter of the crust of the earth is to be seen a portion of the paladium of our continent. In every substance on the face of the earth, except what has been constructed from the gases of the atmosphere and water, is to be seen a portion of the very beginning of the surface of our earth above the waters of the oceans.

What a startling fact this is if we can satisfy ourselves it is true. It is not a matter of consideration by the teachers of science, and it is doubtless the first time in the history of science that man is pointed to the actual beginning of the works of the Creator on our globe. No other author is attempting to see it, and none we believe will deny it when the fact is fully examined. Almighty author of creation, on this beautiful work we are permitted to exist, and it is only at this very late day that we are able to commence an examination of the beginning of Thy handiwork. The world of investigators are all anxious to discover a point of commencement of the examination of all there is upon the globe, and in this poorly constructed article we believe it can be found.

In the next chapter the *modus operandi* of the growth of plants shall be given. In this part of the work our readers can behold a most important and interesting method of the wise author of creation, for providing man and beast with all that they obtain in the way of food and comforts.

Chapter II.

In our last article we advanced the proposition that in the commencement of the unfolding operations on the surface of the earth the original creations were corals, and that from the decomposed and pulverized portions of the corals of the earth every object, except what was derived from the atmosphere or water, was created. In such a proposition but a mere outline of this great truth is evinced, and it is our purpose in this chapter to dwell for a moment in the attempt to render this most important fact obvious to all who may care to examine the evidence of its truth.

In each of our great basins of soil where the sands and mud of continents were for centur-

ies and epochs of the past being deposited from the elevated parts of the earth's crust on such continents, is to be found a condition of substance that will disclose all the evidence of the truth of what is advanced in reference to the origin of our soil. In each of these basins there is either coal, granite or petroleum. Each of these substances are the result of the previous existence of corals on the earth's crust at the bottom of such basins, and on the slopes of the mountains that border them, to the elevation of some hundreds of feet.

The granite is but a deposit of the pulverized and partly decomposed original growth of corals. The coal is the carbonized plant that grew out of the decomposed corals. The petroleum or oil is the accumulation of the substance of the decomposed insects that swarmed in the warm and decomposing plants, and which substance was caused to run into these great basins when the mountain ranges were thrown up. All the oil caverns will be in a valley at the foot of a great upheaval of land, and if the plain at the base of the elevation is broad the oil will be found very shallow, or it will not be found at all. This fact is already known. Now, when the work of pumping oil is completed on account of an exhaustion of this substance, it will be discovered that a greater depth of coal will be at the base of these oil lakes than has ever been found on the sides or in the interior of mountains. The reason of this fact is that the carbon of the plants at the bottom of such basins has never been disturbed, and is in considerable deeper beds and is very much superior in quality to that that has been exposed to the air and water on the sides of the mountain. No fear need be entertained of the exhaustion of our coal fields, for every part of the earth's crust that is now under the soil of prairies and deserts and valleys is covered with the carbonized plants that grew on such parts when no mountains were constructed on their borders. All our Western prairies are predicated on coal beds, which extend from the Blue Ridge or Alleghenies to the base of the Rocky Mountains.

Only a little more labor will be required to unearth a coal field that covers the Ohio and Mississippi valleys. In the future this old substratum of carbon will be employed in the construction of every kind of article for which wood is now employed, and with much less expense. No one is able to predict the one-thousandth part of the advantages yet to be realized from the coal beds of our country. Long after it has ceased to be an article of fuel it will be employed in the construction of our plates and saucers, our knives and forks, our jewelry and the altars of our churches, and the lids of our Bibles, and the cradles of our children.

So let those who read this have courage that at least while they live no want of coal will be felt by those who are able to buy it. The Creator has made ample provision for the wants of man, and it is yet but partly observed.

When it is understood that in the earth our agent of creation is ample to do all the pushing of our cars and other machinery, and create the light and heat of our buildings as well, the world will see that coal as an article of fuel, will not be needed. This is sure to be discovered in the future, and the uses of electrity for all the work of power, and heat, and light, will be obtained from the dynamo in which the earth is only an armature.

Upon all our shores the corals of the ocean are washed, and they are but the broken fragments of the many reefs of such creations as girdle all great bodies of land.

All it is our desire to state further in reference to the development of the coral, is to repeat that in its growth exactly the same operation takes place that takes place in the growth of the order of plants. Every plant in the ocean is only a development of the same character as the coral, only the substance is more refined on account of the condition of the matter at the ocean bottom on which it exists. The sponge is a product of the decomposition of rock.

It is in no sense an animal, and is grown from the decomposition of the rock as the hair on our heads is grown from the decom position of our brains. This fact is so easily disclosed the proposition should be examined by all who are interested in its truth. The stuff called asbestos is very similar to the sponge, and it is grown in the same way.

The fibres of this stuff are like fibres in a plant to a considerable extent. The rocks between which it is given protection from winds, as the sponge is protected from the winds by the water, afford it all the substance it possesses, and it must, therefore,

grow of their decomposition, the electric currents disengaged in the decomposition of the rock construct these fibres. The crinoid and other constructions of this order of plants in the water, are little more than corals. They are derived from the decomposed coral, and are nearly as brackish and coarse in construction.

The inquiry as to their being animals might as well be made with respect to a pine tree, for there is not a particle of difference in their method of development, and they swing in the water as grandly as this great pride of the forest swings in the air.

When a chance is afforded our readers to compare one of these common fingered crinoids with a pine tree of a considerable growth, it is our desire that the comparison be made. All who do it can ascertain the justification for scientific authors claiming that a crinoid is an animal. In each crinoid a construction of boughs, similar to the boughs of a pine, can be seen.

This little spindling plant of the ocean is the original development of what is termed the vegetable kingdom. The pine bears the closest relation to it of any tree in existence, and all others are but distant relations. Whenever a plant of any kind is discovered as large as a cherry tree or cedar, it may be considered a progeny of this little crinoid.

Wherever a forest is removed this earliest of all trees is sure to germinate again. The character of the germ thus produced will be as near like a crinoid as the climate will permit. In northern latitudes the plant obtained from such a source will be a cedar. In more temperate latitudes it will be a spruce, and in still warmer latitudes a pine.

Let any forest, of whatever character of trees, be removed, and the crinoid will appear and exhibit a growth of this plant as much like the earliest species as the soil and temperature will permit, and when they have been in existence for centuries they will be converted into all the varieties of trees that the earth possesses. The date, palm or the fig tree, the apple or the cherry tree, and every fruit-bearing plant will, in time, be produced from the old pine trees' decay and greater development. A considerable more decomposition of a plant's substance is all that is necessary to change the character of a plant, in what is grown from such decomposed substance. This difference in the character of the substance is obtained by the very agent that produces the plant, and its more active escape from the earth will give the plant a difference in substance, and also a difference in development.

Now, what an upsetting hypothesis this is if it is true, and what a simple arrangement it is to create so many different species of plants, and make them all perform a different office in existence! No work of this character of explanation of plant development is yet out, but every farmer can have one on his own farm if he takes this paper and carefully reads it.

Now, when we come to disclose the way plants are grown and the philosophy of producing fruit on them, all we have stated as to the force of construction, can be understood and so plainly seen that no reader of this paper will for a moment deny it. This work shall now be undertaken, and we ask our readers to observe all that we shall state, for it will, if true, disclose the most wonderful and interesting devices of the Creator for affording us all the plant kingdom, the fruit, vegetables and plants of all descriptions that are eaten, and also those beautiful indices of a better world called flowers.

The actual construction of each of these creations is capable of examination, and all that is necessary to be discovered of the *modus operandi* of their unfoldment shall be given.

In each seed of a plant there is only a compact bundle of leaves or a simple moss of consolidated protoplasm. The difference in the condition of the substance is due to the method of the construction of the seed. A kernel of corn is but a composition of the same kind of matter as a stalk, and is only a little more solid and less organized. The seed of an apple is but a bundle of leaves, or waves of protoplasm, thrown into the core of the apple by the pulsating force that constructs the apple tree.

Both the corn and apple seed are intended for a speck of substance, so preserved as to continue their condition of creation until a chance is given them to germinate in the soil. The germination is but a decomposition of their substance, and the performance of pushing it toward the sky. The office of impregnating is never performed in the germination of plants, nor in the construction of their seeds.

When the decomposition of any seed takes place in the ground or in a soil in any condition that enables the earth's magnetic current to pass up through it, the decomposed substance will be slowly pressed upwards by such current, and a chance to commence a greater unfoldment of the plant is then afforded the substance of the seed, and this work is all performed in the further growth of the plant. The first operation is the shaking open of the leaves that are constructed by a generation of the germ.

In all the important operations of growth there is one simple force exerted, and it is this great current of electricity the earth discharges. In such development there is only one simple office of the atmosphere performed, and that is the contraction of the surface of the organs of a plant through the effects of a change in their substance, and which will be fully described. No other philosophy is operated, and no other work is necessary. Every plant on the earth, and all the fruit of plants, either on their branches or in the earth, are produced by these two influences.

Now, let us see if this is not true, and if it is not possible for these operations to be delineated and also understood by any intelligent mind.

No one has, as yet, ever undertaken, with success, to disclose the entire problem in all its details, and in no body of learning is it deemed possible. The failure to understand it is due wholly to a want of knowledge of the thing that performs the work of construction. The one who can accomplish the task of explanation will accomplish a most useful work in the way of science, but it will be a much easier task than the one that consists of removal of old theories or errors. If it is our accomplishment the most we ask is that our friends in the ways of scientific investigation, will allow the world a chance to observe an experimental illustration of the philosophy.

Now, when a seed is so far decomposed in the earth as to furnish a stream of its substance, this substance will be borne upwards as the decomposed fuel in a fire will be, and in a merely shapeless form. It is, in fact, but a slower process of combustion, in which the decomposed substance will be converted into a blaze of such dimensions as to be capable of being pushed toward the sky, as the flame of decomposing wood is pushed.

When a stream of this substance is being forced in the direction of the atmosphere, a concentration of the earth's current is created in connection with it, and as the substance continues to develop this additional draft of such current will draw from the earth a condition of fluid we call protoplasm, and which is only water intermixed with the particles of decomposed earth and gases of the atmosphere. These particles of decomposed earth are the carbon resulting from such decomposition of the corals we were so particular to describe, but the substance of the coral was decomposed in several conditions of construction. It is, of course, true that in this condition of earth we are describing, a great many decompositions and reorganizations were performed before the present order of plants were produced, but it is, nevertheless, true that the substance was but decomposed corals.

Now, when these streams of a seed are thus advancing, this protoplasm thus attracted out of the soil will be connected with them, the streams of protoplasm will unite with the decomposing seed as a body of water will rush into a vacuum or empty space, for the absence of the substance that once existed in the seed will create a similar vacuum. In every germinating seed this vacuum can be discovered, and it will increase until the shell of the seed becomes hollow. When it is entirely hollow a union of the streams of protoplasm and streams of decomposed seed will take place. Any influence that prevents this union will prevent any further germination of the plant. This is often observed when a change of temperature to a considerable extent is made in the atmosphere. A sudden change in the decomposition of a seed will produce a cessation of the flow of the stream of protoplasm toward it, and it will sink into the earth again, except such part of it as has solidified, and the result will be a decomposition of the seed without producing any organization.

When this interference with germination does not take place the work of development is continued, and the stream of decomposed seed is allowed a peep into daylight, and the moment it is able to come into the family of plants, as a child is able to come into a family of human beings, it is covered with a clothing of decomposed substance—a condition of substance similar to our hair. The development of its hair is an essential part of

the growth of a plant, for without its hair it could exist but a few days—about as long as the leaves of a blossom exist. In the creation of its hairs there is only a still smaller exudation of protoplasm out of the pores of the germ. When this clothing is obtained a greater development is possible. The substance pushed out of the earth is shaken open, and instead of a single stream of substance we discover a roll or bundle of leaves, which are extended in as many directions as the number of leaves permit. All kinds of plants are germinated in this way. In the commencement of their growth there is but the simple process described. The cause of the existence of the germ's leaves will be presently described. In the further development of some species a somewhat different course of unfoldment is operated. The difference in the manner of unfoldment of each species is caused at first by the difference in climate and soil. When the change is established the progeny of the species are caused to resemble the parent species by the magnetic influence the parent plant exerts upon the developing germ. No other method is pursued, and no other method is possible. It is the same law that produces in the offspring of the animal and human organization a resemblance to the parent in appearance and organization. All of the operations of the law shall be carefully disclosed as we proceed.

Now, it is important to ascertain what it is that causes a bundle or roll of leaves to be developed in this stream of germinating seed, and what it is that creates leaves on branches or on any part of the germ. The cause of such leaves or waves of protoplasm which constitutes the original stock of a germ is as simple as anything thus far observed, but the cause of this cause is a problem, which the astronomical authors are trying to this day to explain, and without success.

In our revolution around the sun our earth is lifted into the sky twice each day, as far as the character of its form and method of its revolution permits. These noddings of the earth as it is whirled around the sun are what the teachers of astronomy call the earth's nutations or noddings of its poles.

In our description of the creation of the solar system the cause of this phenomenon can be discovered. Now, as our earth is thus lifted up and down in space, or in its orbit, the currents of electricity it discharges are given a pulsating character. We have seen that in the animal and human organizations a pulsating character of this agent's coursing exists and is necessary. We shall now discover that its operations are the same in plants and just as necessary. In our work on the character and development of our earth we shall see that it was necessary, in order to develop that, that a pulse of electricity should beat in its sides and channels of circulation.

Upon the creation and continuance of these pulsations of the earth's currents depends every construction of leaf, blossom or item of fruit or vegetable the plant kingdom affords, or can afford. Without them a barren stalk alone would be all that could be created in the nature of a plant.

All of the necessity and results of this uneven discharge of this wonderful influence of the earth will be observed as we continue the delineation of vegetable growths.

The wisdom of creation in this contrivance will also be seen.

Now, in the growth of the germ the leaves that are shaken open by the vibrating atmosphere, they are the mere waves of decomposed seed that are crowded out of the ground. Each pulsation of the current of influence that is discharged from the earth produces a wave which overlaps the previous wave, and when the germ is out of the ground these waves of substance are shaken open by the action of heat. The different leaves of the germ and all the leaves upon a branch or in the blossom of a plant, will attest the truth of the statement that our good old earth is beating with a warm pulse of life-giving force. In every plant a chance is given the world to see what the earth's noddings, as it is whirled around the sun, will accomplish, and the difference of the constructions produced by these pulsations at different points of the earth's career around the sun, for in each germ, and in every branch, and in every blossom, a difference exists in the leaves corresponding to the difference in these pulsations. A large and small leaf alternately appears in all these creations of leaves. Let all who observe this statement observe this wonderful and important effect of our earth's career in its orbit by examining the leaves on any plant in their gardens. The most exact and unerring operation of this influence will be seen.

Now, as we proceed to disclose the growth of the plant creations, it will be necessary to take some particular plant and follow its unfoldment as there is a modification of the manner of unfoldment in the different species. We will examine a cherry tree. This useful plant is but a grandchild of a crinoid we have spoken of. In each germ of this plant a bundle of leaves is thrown out, and when out of the earth they are shaken open as all germs are. The substance of the growth of this plant is identical with that of any tree on the earth. The construction of its form and the character of its fruit is the result of the rapidity of its growth and the influence of other trees of the same species upon it. No other influence is necessary. When a cherry germ is thrown open a commencement of growth is inaugurated. The same current of the earth continues to course through it and create for itself channels of circulation. The roots are swollen by the augmented influence, and constantly condensed as they increase. Each particle of undecomposed substance is thrown to the surface. This creates a sort of bark in precisely the same way our bones are produced around the marrow in them. The current establishes for itself channels of escape and circulation, partly by the force of the current and partly by decomposing the substance in its way. The undecomposed substance, as just stated, is thrown out on the surface, and its consolidation is bark. It is precisely the same stuff as the wood but it is what was previously created. This difference is readily observed in the character of bark. It is more soluble in any fluid and will decompose faster. In this provision for the protection of a plant we discover a process in every respect the same as the one employed to cover the mollusk or alligator with a bark, or what is termed a shell. The difference in the thickness of a bark on any plant is proportioned to the amount of such deposits on its surface, and the amount will correspond to the period of the development of the parts of the plant, the trunk at the ground, of course, possessing a greater thickness.

The other part of the trunk is produced by a constant separation of the tissues in it, and a construction of what is now as little understood as any operation of nature. The scientific world has examined the development of plants and discovered the actual phenomenon of growth as it was being operated in the different parts, and, when through with the examination, were as little able to inform the world of unscientific minds what caused or produced the growth of a plant, as though they had examined a devil-fish, and they actually knew as little what it was themselves. In each tissue of the plant a chance is offered all who will not allow old theories to mislead them, to discover what it is that increases the size of a tree, for as sure as a tree exists the current of electricity that circulates upward and through the plant, and what is generated in its sweep, is all the substance in a plant that constructs it, except that the bark is the undecomposed atoms thrown out of the channels of circulation—such undigested atoms as the plant receives from the earth. Every tissue of a tree is only a creation of the condensation of this influence, as all tissues are, whether in plants or animals. The atoms that constitute the bark were also creations of the condensation of this influence, but their construction was performed before they were driven into the circulation of the plant. Every object in a plant except the bark is created from a condensation of what drives the substance of the circulation into its channels. The operation is the same as that of the construction of any other organization. There is never a departure from the method.

Now, if it can be understood what the *modus operandi* of a cell construction of a plant is, a world of information is attained concerning the growth of plants. Every plant absorbs from the ground only water, and a very small amount of such atoms as are found in our atmosphere.

In the channels of circulation all of these atoms are decomposed and their substance returned to a condition of electricity, except what is discharged on the surface of the plant in the nature of bark. The decomposing agent is the current that sweeps through such channels of circulation. Every botanist knows that the plant absorbs from the earth only water and carbonic acid gas, or ammonia, and a particle of the gases of the atmosphere, and unless it is true that a plant can absorb in an opposite direction to its growth, and construct itself by these opposing operations, it must be admitted that in some conversion of the substance obtained from the earth a plant is grown, and that this conversion must be some process of decomposition, and that what results from the de-

composition must be the refined substance of growth.

In this connection it will be important to remark a moment on the capacity of electricity for condensing. In every eye of the animal and human organizations a covering of the pupil is observed. It is precisely the same kind of creation as the cell of a plant or animal tissue. This cell or semisphere of matter is but a condensation of the electric current thrown out by the optic nerve before the eye is opened, and allowed a sight of the creations of God. The lids are closed when the organization is unborn, and in this condition of the lids the pupil is covered by a condensation of the current which would be thrown quite out of the eye if the lids were open. The whole ball of the eye is but a greater extent of such a creation and that part of it that is white is constructed as the bark of a tree is constructed, by a deposit of the undecomposed substance discharged by the optic nerve—merely the waste and partly-burned cells of the optic nerve. In each eye a greater force is exerted by the current of the optic nerve on the cornea, or covering of the pupil, and the current throws this substance quite out of the front of the eye, if properly operated, in all cases after birth. Every cataract is only a coating of the same kind of substance the white of the eye is composed of, and it is produced by a failure of the nerve to disengage it from the cornea or the front of the eye. In every weak and debilitated organization a cataract is likely to be seen. In many idiots whose brains are so inactive as to be unable to generate a current of this influence of any great extent, the eye is covered with a cataract, and sometimes they are born blind. The brains of such persons do not give the optic nerves a sufficient current of this eye-constructing influence. Let every doctor of medicine observe this only rational disclosure of the construction of a cataract, and in one year after they are in possession of this truth, every cataract in the country on the eyes of human beings can be removed, and by the application of what constructs an eye. The application can be made by rest of the brain; and if this does not afford a sufficient current to the optic nerve, the additional current can be obtained from a common battery. A current applied to the back part of the head and allowed to course through the brain to the front of the eyes, and through these soul-revealing nerves will accomplish the decomposition of a cataract. Any good oculist or electrician can arrange the instrumentalities for this important work. All persons whose brains are exhausted by the use of tobacco or from overwork are capable of attesting the truth of the statement now made, for whenever they are so exhausted a cataract commences to form, and they see gray patches or bubbles in their eyes, and when they are rested or have recovered from the effects of tobacco, the patch or bubble is dissolved; the new current thus created will perform the dissolution.

Now, we can begin to see what may result from a better understanding of electricity. In each plant as well as in all animal creations, a cornea or cell is the foundation of each tissue, and the whole tissue is but a pile of corneas capping each other. What will our scientific authors conclude when it is stated, and the evidence furnished, that in a pile of these corneas called tissues, there is a construction somewhat less condensed but of the same form and character, that is capable of escaping from the body of a plant, or animal, or human being, when the organization is destroyed? and what will be their conclusions in respect to their agnostic pretensions when it is disclosed that this somewhat less condensed substance in these corneas of the human system is the thing that all the creations of the universe were intended to produce and that it is the very object that the saint and sinner are praying may be saved from an eternal decomposition by fire; and what will they conclude in respect to the theory that electricity is but a mode of motion of what they denominate molecules? When this truth is known the additional truth that the unconsolidated influence of this character is allowed to pass out of the human body with the souls of these corneas, and operate them still, as it did both the soul and body when they were united, will also become known.

This astounding proposition is coming from the columns of this paper, and in its production all the evidence of its truth that a common intellect can ask will be given with it. The construction of these tissues of corneas is calculated to allow a departure of these interior corneas or linings, and a departure is sure to take place when a sufficient disturbance of the currents of electricity in

the organization is produced. It matters not whether the organization be a plant, an animal or a human being.

In every plant where a condition of growth is examined a cornea is sure to be discovered as a base of a tissue. The other parts of a tissue are only corneas oversetting each other. The influence that is creating such a construction of corneas is the same that creates them in all organizations. In one of these corneas that are in a plant is to be found the creation of the corpuscle that is given to our blood when a vegetable dinner is digested, and in an animal cornea the creation that affords a similar corpuscle when we eat animal food. These corpuscles are so much alike that it is impossible to detect any difference when observed through the microscope. Only a difference of time in the period of their decomposition and in their separation, called digestion, can be observed. The animal corpuscle decomposes much faster than a vegetable corpuscle, as it can be produced faster and is not so solid.

Now, when the atoms of substance in a channel of circulation in a plant are decomposed, the influence generated by their decomposition will be forced quite through and out the end of a tissue, and when it is out it will so consolidate as to produce a cornea over the end of the tissue or hair, and a quasi condition of solid is the result.

It can be seen coming into existence at the end of a tissue. Every one of its operations can be detected except its exit from the extremity of the tissue or hair, and the reason why this cannot be seen is because the substance is too refined for observation. The work has been examined by the teachers of science, and it was only a want of knowledge of the character of the force that produced the operations of a hair or tissue that prevented them from deciphering all the philosophy of the problem of vegetable growth.

In each tissue the use of electricity is to create these corneas or cells, but in the unfoldment of other organs of the plant besides the stalk, the use of this agent is considerably different.

A branch is produced by the rupture of the tissues on the sides of the stalk or twig, and an outlet created for a whole volume of substance to escape. This construction of twigs or branches is disclosed, not only by the way they are thrown out, but by the character of a knot or the base of a twig in the stalk or branch from which the twig is grown. This base of a twig or branch is always harder than the other parts, and this difference is produced by a portion of the protoplasm, or the atoms of substance in it, consolidating at such places as the twig is started. The amount of such atoms the current throws out is so great as to prevent their decomposition in part, and this portion of them solidifies in the base of the twig. After a twig is formed a construction of its tissues will then be like that of the stalk. Now, the bursting of the twig is caused by a greater rush of protoplasm through the channels of circulation at a period of warm weather or in spring, and as all trunks and twigs are smaller as they advance from the earth, each of these parts of a plant furnish the occasion for this fluid to burst out, on account of the greater amount of it thrown into the base of the plant than get out through its top and on its surface. It is simply a gorging of the channels of circulation, and the pressing substance forces itself out at the points where the gorging takes place.

The twigs are always produced after the buds of a plant are produced, for so long as a chance is offered for the substance to get out a rupture will not take place. A chance to witness this operation is afforded all who take the trouble to examine the growth of a twig. A leaf is only a continuation of the development of the twig, and a twig is from a certain point converted into a leaf only by a bursting of its tip, as a branch is bursted, as just described. The way is all explained by the observation of a common gas jet when the gas is ignited. In each leaf a channel of circulation is created as all channels in plant circulation are created, and directly through it and from this channel others are created of the same character, and still others from these. In the spread of such channels a union of the substance of the construction of the leaf is made. The extent of this union depends entirely on the rapidity of development or growth. The leaf that is developed tardily, as an apple or cherry tree leaf is, it will form but one connected body of an uninterrupted edge, but if the leaf is grown rapidly the branches of the leaf cannot unite, and of course it is the great distance between these points that prevents the union. Now, let our readers all examine the leaf of an

apple tree and the leaf of a maple or oak, and let them also observe the time it requires each to develope.

This is all that can be given of this wonderful operation of plant growth at this time. In our next chapter all the beautiful philosophy of the development of the flower and the fruit, and the growth of the turnip and cabbage shall be given.

Chapter III.

In closing our last chapter on this subject we gave an explanation of the development of the trunk, twigs and leaves of the plant, and promised that in this chapter an explanation of the growth of a blossom, the construction of fruit and the vegetables we eat, should be given. The promise shall be fulfilled. In the wonderful operations of producing flowers and fruit, and such vegetables as are developed in the ground, there is as interesting an amount of the work of creation as can be discovered in anything of the character of vegetable unfoldment.

The end of a twig, of course, is the last operation of the growth of the tree before a blossom is created. This fact is all that enables a flower to exist on the end of a twig, because the end is so much more porous and capable of allowing a pulsating current of a substance to burst it open.

The production of a bundle of leaves at the end of the twig is only a repetition of the process of producing a bundle of leaves at the germination of a seed. The leaves are but waves of protoplasm thrown out at the end of the twig by the pulsating current that produces the development of a stalk or branch. In each bundle there is but a continuation of these waves. When the bundle is so large as to be capable of being shaken open in the warm atmosphere, this work is accomplished and in precisely the same way the germ of the plant has its leaves or waves of the decomposed seed shaken open. These leaves are colorless when unopened, and after they are opened they begin at once to acquire color. They are allowed an opportunity to acquire every color in the catalogue of colors. The colors are the result of different degrees of decomposition of the leaves. It is the difference in the chemical action of the leaves that gives them a different aspect or color. The most abundant part of the leaf is the one that will be the least influenced in this chemical or decomposing action, and as a consequence it will continue white longer. The rose is a good example of this truth. Every red rose is created with thin leaves, and a white one is always created with thick leaves. Let this statement acquire verification in the season of roses by the maid who is sure to pluck both kinds.

She will be sure to have a white rose in her hair when she goes to the botanist to inquire if this is true.

Every color of a blossom is but a modification of the brightest red, and every condition of colors is but such a modification of this most active of decomposing aspects. In each blossom a mere difference of decomposition of its leaves is the sole cause of the difference in color. Let it be remembered that in every leaf of a flower a white part is decomposed last, a yellow part next to the last, and all the brighter parts in proportion to their approach in color to the reddest part. In our article on colors hereafter the world shall have the benefit of learning what colors are, and how to produce them, and the knowledge shall be obtained without any other cost than the price of our paper.

In our catalogue there is a great amount of examination bestowed on their creation. Every kind of color, from the simplest white, is carefully considered.

The most beautiful color ever seen can be obtained from a common production of rock or sea salt. It is obtained by simply saturating this substance with a little sulphuric acid. It will compare with the golden sunsets and sunrises.

In the decomposition of a blossom we are able to discover all the cause of the existence of a berry, or apple, or any fruit that ever grew. We do not, in this statement, include the development of those degraded constructions called nuts. When a blossom decomposes the pores of a leaf in the blossom are closed. The contraction of the leaf or its substance is caused by the same condition of crust the decomposition produces, which is constructed over its surface and which contracts. The most of the decomposed leaves will present an appearance like charred paper. The carbon thus created comprising a part of the appearance. The effect of this contraction and decomposition is to prevent

a flow of the current of electricity through these leaves longer, and as soon as this is in any degree accomplished an exudation of substance around the twig at the base of the blossom will take place. It is simply an escape of the substance in the twig, around the twig at this point, that creates a cherry or apple, or any species of fruit. In this process of creating fruit we can discover the process of creating vegetables at the base of a plant that has only leaves, such as turnips, beets and carrots, and in their development we can discover why cabbages are developed partly in the ground and partly out of it.

When a blossom is decomposed its leaves will in a few days drop off, and a chance afforded the fruit to be extended in that direction as well.

It is accomplished in the same way it is extended in all other directions. The core and seeds are created around the twig.

No fruit is capable of separating the twig around which it grows. In every fruit we can see the old stem extending through it. The seeds are but protoplasm thrown out of the stem within the fruit.

They are consolidated by the force of pressure, and only one at a time is produced. The seed of the apple or pear is only a bundle of waves exactly like a bud, and would be capable of blossoming as well if they were exposed to the atmosphere.

They possess the same shape as a bud, and are dark when the fruit is ripe, because they are somewhat decomposed on their surface, and still more consolidated. This crust on their surface preserves them until it is time for them to decompose in the earth and germinate. Let our teachers of science ascertain how any decomposing blossom or pollen can give a seed the means of germinating.

No one will longer claim such an origin of vegetable germination when our statement is examined. In the cherry a seed is so decomposed that it is as hard as a stone on its surface. It would be difficult for pollen to effect it. No part of it is produced until the pollen of the blossom is entirely decayed.

The seed is crusted with a decomposed part of itself. The cherry is capable of decomposing it. The acid is created in the rapidity of the growth of the cherry.

The taste of a cherry is more sharp or sour than that of an apple, because it is decomposing faster. This is all the explanation necessary of the difference in the taste of fruit. A more important fact, perhaps, could not be stated concerning the sense of taste. This will be admitted by all who will observe this truth.

Let all our physicians observe this scientific examination of the uses of electricity in creating the difference in food, for it will enable them to designate the appropriate food for the sick, and it will allow them a means of giving their patients a flavorable food that is harmless,

The readers of this article will be able hereafter to come up to the table with the understanding that from the sugar in the bowl to the vinegar in the castor, only a difference in the decomposition of the articles of food before them produces a difference in their taste. Let the reader remember that the creation of a cherry or apple around a twig at the base of a flower, is the result of the discharge of electricity from the twig around its surface after a flower has so withered as to check the discharge through its leaves.

In the development of what are called vegetables, such as turnips, beets and parsnips we can observe only a process almost identical to that of the growth of an article of fruit on a branch of a tree.

The root of the turnip is a twig of that plant as well as its stalk. It operates as much like a twig as a stalk. The way the leaves are unfolded is but a blossoming of such waves of substance as the plant throws out. In the top of a turnip, beet, parsnip or carrot we see but a great coarse blossom as much like the blossom of the rose-bush or violet as anything so large and coarse can be. The leaves of these great blossoms decompose to some extent, and their growth is finally checked. When this takes place, an opportunity is afforded the root to grow. At the base of such leaves this part of the stock is sure to increase in size as fast as its top refuses to grow. Now all see in this operation exactly the same operation as in the development of fruit on a twig at the base of a blossom; and as the top of a turnip cannot decompose as fast as the leaves of blossoms, a chance is afforded them for growing considerably more than a blossom can grow. This ability of the leaves of this class of plants to grow is found in the thickness of the leaves alone, and their color will invariably mark their rapidity and degree of decomposition.

Their degree of decomposition will invariably depend on their thickness. In the leaves of a beet this is seen quite plainly, as they are both thinner and redder than those of a turnip, and they are decomposed and withered sooner. Let us ask all who have seen and eaten a turnip or beet if this is not true, and if the beet is not less sweet than a turnip or carrot.

Now, in our old friend, the cabbage, we are able to find a still greater degradation of top. This stubborn old vegetable is as much like a rose-bud as such a great amount of coarse leaves can be.

It is in all respects like a turnip, except in its ability to unfold its bud. It is prevented from unfolding its leaves because its root is capable of continuing the throwing out of its waves of substance. In this work of the cabbage root a considerable amount of ingenuity is to be seen. The root of this plant is upright like a turnip, and would operate in the same way but for the fact that it is full of pores on its sides, and in these pores that are below the surface of the earth, the protoplasm is poured into the plant as fast as the old earth pulsates, and while these pulsations are continued this great bud on the top will continue to obtain leaves in its interior. If the earth from the root is removed, except at the bottom, the cabbage will unfold considerably like a turnip. In each cabbage-head there is a white leaf in every instance where they are not exposed to the atmosphere.

Now, in the plant called the orange tree an apple is developed as well as on the apple tree, and the taste of an orange is considerably like the taste of the apple. The difference in the appearance of this species of fruit is caused by the difference in the atmosphere in which they grow.

The orange rhind is only a greater decomposition of the surface of the fruit. The pine apple is considerably like the turnip in its construction. It is a species of turnip, and its development in a warmer atmosphere and more simple soil, gives it a greater amount of capacity for decomposition. The uses of such plants are, by the difference in development, made appropriate for the food of both man and animals in the latitudes where they are grown.

The banana is but a corn stalk with bunches of cobs.

Now, what can cause a stalk of corn and the cob and corn to develop? It is this problem we will now undertake to solve.

A kernel of corn, as we have previously stated, is only a mass of protoplasm solidified. When it is in the earth the inside of the kernel is first decomposed, because it is first affected by the warm and damp earth. A quantity of the moisture of the earth is absorbed through the generating point of the kernel. This part was the last to solidify, and is softer than the other part. When the decomposed matter is germinating, the whole crust of the kernel will remain intact. This allows a stream of substance to approach the germ from the earth on all sides of this shell, and furnishes a construction of roots capable of maitaining a considerable stalk. When the germ is out of the ground, it is shaken open, as all germ leaves are. Now in this unfoldment of this germ of corn, the leaves branch out but in two directions, because they are unfolded in that way when they are first produced. The shape of the kernel prevents the substance being thrown out, except on two sides of the stalk or first wave. If the kernel was oval or round, the leaves would be thrown out all around the first wave. In corn that has a round or nearly round kernel, the leaves will grow all around the stalk, as in the common chicken or pop-corn. This beautiful provision for creating cobs on opposite sides of a stalk is quite as necessary as any other arrangement in the development of a spear of corn, for it prevents a corn stalk being broken down by a greater weight on one side than it can bear. In the chicken corn the cob is too small to break the stalk if it is multiplied on any side. This is often seen in the growth of this kind of corn. Now, when a stalk of common corn is grown for a few weeks, the tassel begins to make its appearance, and before any other change in the plant is seen. When this tassel is grown far enough out of the stalk to commence decomposing, the cob and its silken accompaniment make their appearance. The cause of these productions is the suppression of growth in the direction of the tassels and leaves of the stalk. Now, when it is seen that a cob is only a bursting out of substance on the side where the leaves unfold, it can be realized that we are correct in what we have stated about the growth of branches and the effect of decomposition, or checking of the growth of leaves; for it is only the repetition of these

phenomena in the growth of fruit that is performed in the development of a cob on a corn stalk. Let any one who desires to see this beautiful philosophy in operation watch a corn field as it is unfolding.

In no particular will it be found different from what is now stated. Every corn cob and its attachments is grown at the base of leaves, the same as any kind of fruit is developed at the base of a blossom. On corn stalks the cob is over the leaf, because the stalk is more easily ruptured in that place. It is from the suppression of growth of the stalk above the cob and in the leaf that the cob is thrown out. Now the cob is allowed to increase in size until its surface begins to decompose and solidify, and when this takes place the substance of growth will be squeezed out through the pores as our hair is squeezed out, or as a particle of perspiration is squeezed out through the pores of the skin, and then it is allowed to solidify. This is a process as wonderful as any operation in nature, and it is as admirable. The construction of the kernels in rows is caused by the silken threads lying along the cob and which divides the substance of the kernels as it is thrown out. Between every row of corn a silken thread is discovered, and also between the kernels in the row. What an astounding preparation for this useful grain? All that is stated can be discovered in any ear of corn that is growing, and we ask that this work be examined. Any one can be satisfied how corn is grown if it is examined, and we believe this description is the first that has ever been given of the development of this plant, and we only ask the credit of giving it correctly. No glory is wanted for aiding our readers to behold this beneficent provision of the Creator. All it is necessary to state concerning the development of the silken threads is that they are but hairs grown out of the cob as any hairs are grown. They are produced before the kernels, and at regular intervals of space and time. The leaves of the cob are the same constructions as the leaves of the germ around the incipient stalk, and are constructed to cover the cob. When they are fully grown they commence to decompose at their tips, so that their extremities are contracted around the end of the developed ear of corn. What can a finite mind utter in approbation of this delightful method of the Almighty for creating the most important grain that man or beast consumes? It is beyond the power of human utterance of approbation, and it is only possible for us to say that it is the grandest exhibition of divine intelligence in the vegetable kingdom.

The growth of other cereals is but little different from the growth of the tassel on corn, and it is but a conversion of the tassel of the other grains into a bundle of seeds that constitute the growth of oats, barley, wheat and similar plants. The growth of the plants on which nuts are developed is in all respects like the growth of a cherry, except the fruit is so mixed with the substance that creates bark that neither leaves nor perfect fruit are produced.

The bark is but loosened around a twig on such plants, and the substance thrown out around the twig allowed to decompose under such a separated part of the bark.

A construction of this kind is but a degraded attempt to create fruit. The reason of its failure to develop as much as fruit is developed is because the plant on which a nut is developed is too undeveloped to permit a blossom to be created.

All plants that have mere crusted seeds are different examples of this want of unfoldment of a plant. The appearance of a walnut or butternut tree indicates a condition of stunted development. Their leaves are constructed only partly like a cherry leaf, and in all fruit trees a leaf of the character of a cherry leaf is such.

Now, it is, of course, impracticable to describe the development of all the species of plants, and it is unnecessary, for in the principles of development already explained and the methods described, all the means of examining the development of the whole vegetable kingdom can be obtained.

Let us now see if it is not possible to ascertain what the origin of all small plants was. We have discussed the origin of the tree and our forests. Every one of the smaller plants, of course, had an origin as well. In a very simple plant called a clover stalk is to be found the origin of many. This small crinoid is very much like its grandparent, the original crinoid. It is the first plant to appear in all cases where a new creation of soil is produced and where all other plants are removed. When it grows on such soil a few seasons, the plant will be followed by a species of herd grass, so-called, a plant only

one step more advanced. Every farmer is acquainted with it. When the herd grass is grown a few seasons, another species will succeed that, and it is called a buttercup. When this species is grown awhile another species called white daisies will appear. When this is exhausted a small creation called the sorrel will be produced, and this is followed by a moss. The moss is followed by a vine, and when a vine is exhausted a mere toadstool grows. A mushroom is but a toadstool from a soil. The other toadstools are from decomposing wood.

Now, in these changes there is only a rise and fall of constructions of vegetable nations, as all orders of creation have their rise and fall.

The clover is only a little greater development than a crinoid, as most grasses are. This plant is as well developed as possible and by its existence a better condition of grass made a possibility. The clover resembles the old pine in many respects. It will not grow where a pine tree has not also grown. It is in this connection that it should be stated that a coal mine can be discovered under the soil wherever a pine tree is germinated. It will be sure to be reached in digging as deep as the lower strata of rocks, for all such rocks are on the coal. Let us ask our geologists to contradict this statement if it is untrue. Every coal mine that was ever opened was covered with a growth of pine at one time, and in each mine a chance to behold a confirmation of this fact is found in the existence of undecomposed pine knots.

The reason why the coal mines of Pennsylvania are more easily approached is because the soil over them is of less depth. In our own latitude a greater depth of soil is created because a greater deterioration of rock and vegetable productions have taken place. This results from the more severe frosts and greater length of cold seasons, and more melting of snow.

In the higher mountains traces of coal are already found, and in many valleys the coal is uncovered in the great depth of some wells. If our statement is incorrect the many geologists are able to contradict it.

In the future so many mines of coal are to be opened the shipping of coal to the city of New York will be so cheap and the coal so plenty, that it will be of no great value per ton.

Now, let us return to the clover that is grown over the beds of coal, and ascertain why it is so soon exhausted. On every kind of soil a plant is only a better construction of its substance. The earth insists on constructing its substance into more beautiful shapes, and will always do it when it is possible. In the development of the clover stalk this is attempted, and in its effort the construction is obtained as far as possible, of a great pine tree, and all that prevents a clover stalk from becoming a pine tree is the want of a sufficient force of electricity from the earth to produce such a development, and the same condition of soil that is employed in a growth of pine. Now, as sure as anything that was ever stated, the same reason that is seen in preventing a clover stalk from becoming a pine tree, prevents the hair growing on the under side of a finger, as well as the back or top—the difference in the depth of the soil. The depth of soil will always determine the amount of vegetable growth as well as its character. It is the same philosophy that is seen in the growth of hair on the person. Where the battery is far from the surface the hair is not produced to any extent. In the human systems the battery that produces hair is the marrow in the larger bones and the blood.

The origin of the different grains and vegetables are to be found in the superb little plant called thistle. It is only a little further developed crinoid, too, and is much like one. It is capable of being converted into wheat, oats, corn and barley. The tops of all these plants are extended thistle tops. What a resemblance between a head of wheat and a thistle burr, or between this burr and a corn cob and its hair and leaves? Oats are only the tassels of the corn.

The many small plants are but degraded productions from some of the developed crinoids, as the wheat, oats, corn and all the grain-producing plants. All of them were one day as large as any of these creations.

The little violet, so very cunning in its effort to imitate a rose and cabbage, is but the lingering work of a sunflower, and it is this same plant that affords the origin of our cucumbers, pumpkins and squashes.

The flowers of all these orders of growth are very much alike.

The dandelion is also a creation from a degenerated sunflower, and as much like the old stalk as it can be and be so small.

The origin of a watermelon is a pumpkin, but it is a greater degree of development. The watermelon is more fully developed in the more southern countries, where it is very warm on the surface, and in sandy soil.

This plant will decompose so rapidly that it is dangerous to eat it one day after it is taken from the vine. It would be as sour as any acid if there was not such an immense amount of water in it.

Now, it is useless to undertake to go further in pointing out the origin of plants, for as we stated in the case of development, the methods of operation already pointed to will enable the scientific inquirer to obtain a knowledge of the others.

The cause of a species of plant being reproduced is the problem we will now undertake to explain. The present theory of the scientific world is, that there is some office of impregnation that the pollon of a plant performs. The growth of plants, as we have stated, will show that this theory is only useful till a better one is found.

All our plants are related to each other by ties of consanguinity, so to speak, and their affection for each other is of the same character as the affection between the animals and between human beings. The difference in kinship creates, as well in plants as in human beings, a difference in attachment. This will be so plainly pointed out that no soul who cares to observe the evidence, will for a moment deny the truth of what we state.

Every plant in our gardens is a constant observer of this law. The old pumpkin in the corn field is as well aware of the squash's existence in the garden as we are of the residence of our cousins when they reside near us. The pumpkin cultivates an acquaintance with his relative by extending to the squash a good current of the agent of love we have described in the work on electricity in the human body, and the squash sends one back. In a short time the squash begins to appear pumpkin-like, and the pumpkin will begin to appear a little squash-like.

In a few seasons the pumpkin can convert the squash into an organization like itself. In this operation of the magnetic influence of a plant on a similar plant is to be found all the philosophy of amalgamation of plants, or of the reproduction of plant species. The influence a parent plant exerts on its young germ is identically the same as that of the pumpkin on the squash. In every instance of reproduction of plants this law is observed. No departure from it is possible, except to the extent of a diversion of unfoldment by a similar plant operating on the germ at the same time. Now, whoever desires to ascertain the truth of this fact can do so by allowing a a squash and a pumpkin to grow side by side, or a cucumber to grow beside either; or an apple and pear to grow side by side for a few years when germinating and afterwards. In fact, let any plant germinate in the presence of others as much like them as these plants are like each other, and in every instance the operation of the law can be observed. Now, the reason why the parent plant can induce the germ to grow like itself is the same as that which allows a picture of a person to be stamped on the chemicals in a camera, and the same as that which allows a mother to impress her forms and features on a chemical construction in the magnet that is created for her child's development. In this daguerreotyping of the human or animal mother, the male parent is allowed to perform a subordinate office in stamping his features on the developing offspring. This work is similar to the intrusive interference of the pumpkin in the growth of squashes.

It is one law only in every operation of reproduction, whether in the animal or the plant, that allows the progeny to copy its parent.

No one is able to exercise any choice in its beginning in life, and no parent can decide for itself to what extent its offspring shall copy its parent. Every order of animals is obliged to continue its form, and in few, if any cases, have the products of a mixture of distinct species been able to propagate the unnatural result. Even as between widely-different races of human beings the progeny is degraded. Such an aversion is manifest by every organization in nature to the surrender of its type in the propagation of its offspring, that only a degraded result can follow its surrender. In every race of the human family a degradation of each is effected if they are as widely different as the whites and negro, or the Chinaman and whites, or the Malay and the whites. No one has ever seen any other result, except in the few instances of a superior progenitor transmitting his faculties to some extent to a product of a union with another race.

The absence of any knowledge of the influence a magnetic current of a plant, or of an animal or human being, could exert on its germ, or offspring, was all that encouraged the scientific and medical professors to conclude that a parent or plant was able to impart to the organ of reproduction in the human and animal mother, or of a plant to its own seed, a substance capable of developing into a plant, or into a person or animal.

It is all error, and it is but a question of time when the old folly will be given up.

A far easier and more philosophical method is ordained for the reproduction of all species, and it is the same in every organization that reproduces itself.

When an explanation is given of the development of the original and offspring of the animal and human species, it can be seen what co-operates with a magnetic current of the parents to unfold a more complicated and wonderful creation than is found in a plant. In the germination of a plant only a current of this great agent of nature we call electricity from the parent plant is necessary to render the germ of its seed a plant like itself.

In a work of nature so complicated as the animal or human organizations, a more wonderful and additional agent is also necessary. This agent shall be described in the future numbers of this paper.

Now, let our readers watch the unfoldment of the vegetable kingdom around them, and if they can detect that which is here stated is untrue, we will consider such discovery.

ORIGIN OF SPECIES.

Chapter I.

In commencing the work of disclosing the origin of animal and human species, it is to be regretted that those who will read our work are not all the possessors of the publication of our explanation of the origin of the species of plants, for in that article it was discovered what a mere crinoid was capable of producing under different conditions of soil and climate, and the way was opened for a more ready comprehension of what will now be stated. In the vegetable kingdom all the different orders of plants are only greater developments of one simple plant, the little crinoid, or we might say the coral, and it is only a more developed coral that we see in any species of plant to-day. In the origin of animals and human species a widely different philosophy of creation was adopted. It will astonish all who are unacquainted with our views to learn that in every species of the animal kingdom, and in every different race of the human family a separate and different object was the origin of each species. In the animal kingdom, or what is better called the brute creation, each species were derived from the emanations of vegetable organizations. In a human race an emanation from an animal was the beginning of the creation of this order of beings.

In affording the rea er a theory of a widely different character from any now considered in scientific circles, a most important obligation is placed upon our shoulders, for it is so very unusual for a writer to uncover what is not in the eyes of any scientific investigator, that it is a duty to such as are asked to read it, to offer all the evidence of its truth that is necessary to convince the reader of its probability.

We accept such a responsibility, and if it is not executed as it ought to be, we will allow all who witness the failure to con/ince us that it is all error.

The wisest of the human race are but pigmies in intelligence if we are to compare their accomplishments with the work yet to be performed, and it is only a desire to afford a single spark of illumination to the pathway of investigation that our attempt to disclose the origin of species is undertaken.

The only theory of consequence now accepted or discussed concerning the origin of the animal creation, is that one which was advanced by the most painstaking and unostentious of scientists, the late Charles Darwin. His fame is coexistensive with civilization, and his body is allowed to repose where only great authors and kings and princes are sleeping.

The men of every clime and nation are doing him honor. The student of science is all the while reflecting on the indications of the truth of what he stated. The old colleges of his country and the institutions of learning of all countries are fast concluding that it is after all a work of sound, truthful and beautiful description of a method adopted by some style of creator for bringing man and animals into being, and all the croakers against the church and against the bible are full of acclamations of delight at what seems to afford them a ground for denying all the authority of either bible or church.

In all this great amount of applause over this work of a quiet and unprogressive man it is to be discovered that there is but a morbid delight at what is soon to be found only a mistaken attempt to unravel a problem on which the wisdom of the world has been exercised. It is sure to be found that from all the facts unearthed in the many years of diligent and arduous labor of this gentleman only a shadow of truth was gleaned.

The mere fact that a law of some character operated to convert a species of animal into a human being.

No origin of the animal is discovered, and no single item of evidence incapable of being overthrown is produced in support of the idea of this author that one species was evolved from another. A more complete failure is nowhere to be found in any great mind's production, and it is only charitable to state that this author was in doubt as to its being true, and frankly admitted it.

In each of his references to what he considered possible evidences of a growth from one organization to another, the merest indication of a change is all that is seen.

There is no inchoate condition of one of the species that evidences any such change

of form. In every species a distinct and complete organization is discovered. No one of them is different from any other of the same species, except in the form or size of one or all the organs, and in no fossil is there discovered anything that establishes the fact of a transformation of any one of the different orders of animals to those belonging to a different kind of creation. So faithfully is all the features of a creature transmitted to its progeny that an escape from its operation cannot be discovered, except in a few instances of cross of races, and such products as these are never repeated, and their creation is not claimed by the evolutionist to be the means of evolution. The apparent approaches of a lower to a higher order are in every instance, on examination, found to be but a similar species and quite as independent of those of which they are resembling as either of the other species. The molers and hoofs of a horse that have been so often pointed to as a possible result of the transformation, of a reptile with great claws and great teeth, are as unreliable as matter of evidence of such transformation as the claim of transformation itself, or that the monkey is only one step down in the creation of the human race. The entire amount of fossil remains, and animal creations in existence will furnish no competent evidence of the character of evolution as now understood. The disclosure of all animal origin and the philosophy of the human creation, we shall attempt, if true, can satisfy all who read it that only a great mistake has been made in all the faith that is given this so-called theory of evolution, and in each order of living species a wonderful contradiction of this theory is to be found, and in this discovery a world of important information is also to be obtained. It will be of more consequence to our scientific authors than all the facts collected in the work of the author of this theory, and this is stated with every respect for his great work.

In every animal a chance is given man to discover the method of its creation and the way it is developed, and the source of its existence. A most remarkable fact connected with all the works of the Creator is the existence in each order of creation of a sample of the method adopted for its unfoldment, and this is true of the stellar creations as well as of all smallar organizations of the universe. In each of our organizations this curious and necessary adoption of an index of the means of our creation is also to be seen.

The great obstacle in the way of discovering the methods of creation in all things is the assumption by all the investigators of scientific problems that no disclosure of the works of the Creator can be made except in and by an examination of the more gross and observable things called objective matter.

Dismissing from their minds all contemplation of any influences of a spiritual character, it is impossible for them to understand what can be created of matter if it be operated on by what we will call ethereal influences. It would be more satisfactory to us to state that in what is called the spiritual spheres there is a greater degree of the actual forces and realities of nature than in the more gross and observable orders of existence assigned to the deportment of so-called matter. It is a fact that in the so-called unknowable orders of the work of the Almighty there is vastly more to be known than in what is considered knowable, and when we know something of such unknowables we shall find that what is now denominated matter is but a meagre portion of matter, and that after all, in discoursing upon the spiritual side of creation we are considering only matter in a more refined and beautiful condition. It is our misfortune to advance a theory respecting the origin of man and animals at a time when Herbert Spencer and several cotemporaries in the eastern world are fastening upon the minds of all the thinking classes in all countries the idea that man is limited in the scope of his inquiries, and that outside of a great scope of observable phenomena all is unknowable. This parasitic incubus generated by those who are unable to master the problems the Creator has given man to solve is as disgusting an impediment in the march of intelligence as can be instituted.

Without intending any reflection upon the characters of such teachers, it is but just as well as appropriate to state that the unknowables of their construction are just so many confessions of their want of capacity to do the work allotted to the human race in the way of uncovering the creation of all orders of existence and the methods of their creation.

It is all a mere surrender of what they should perform and nothing else

The very assumption of the existence of an unknowable thing is a contradiction, for it cannot be known to be unknowable unless it is known to be beyond the power of the inquirer to understand it. It requires at least a knowledge of its character to give the inquirer a right to say it is to him incomprehensible. He must know what will satisfy him that he cannot master the problem, and this requires a partial examination of the subject. In every corner of creation a work of nature is capable of solution by the human faculties, and in every problem of the universe a means is to be seen for its solution.

No secret is existing in nature and no mystery is so great that it cannot be fathomed by the human mind. It is but a question of time when all the affairs of creation are familiar to the children of God. It is only a confession of ignorance to deny this, and it is but a very limited period before so much of the mysteries of Mr. Spencer's unknowables will be unravelled that the intelligent mind in all quarters of the world will cease to respect the *ipsi dixit* of any one who exclaims "thus far is man to go and no farther."

If what this article will contain is true, or true to any great extent, the "unknowable" character of the animal and human origin will be discovered, and the old knowable deniers of our theory will cease to say that the origin of creation so far as animals and man is concerned are unknowable. It is true that the authors of so many unknowables are inclined to believe that such origin is discovered, but if what is to be disclosed in this work is true it will also be discovered by them that a knowable thing has been overlooked by them, although they supposed the truth was disclosed.

The origin of every animal species that has occupied the earth and those that are now in existence, was the thing a plant is capable of evolving. The origin of every human race and of every human being now on earth was a thing that an animal is capable of evolving. These very startling assertions constitute the theory we are to advance, and in the presentation of it we ask only the attention of our readers. We are in no sense concerned about the result of its examination, or the character of the evidence we can offer in its support. No one who is capable of understanding what is going to be stated will have any doubt of its truth, we verily believe. The evidence is such that no one capable of examining what will be pointed out will desire anything more than a chance to examine it, and it is hoped that all who read this work will take that trouble.

In each plant all the process necessary to construct what can be converted into an animal is constantly being operated.

In every animal all the process that is necessary to construct what can be converted into a human being is being constantly operated. In these orders of creation the same process is being performed. The operation is simply a work of the agent of creation we call electricity. This old and inappropriate name for this agent is all that we can employ, for it is necessary to be understood.

The name should imply something of its character, and this would necessitate its being called basic fluid as well as agent of creation.

It is such a fluid, and it is nothing else. Every creation of the universe is but a condensation of this fluid in some shape the Divine mind ordained. This is a fact that at once overthrows all the dogmas of Mr. Spencer and his coadjutors in science, for it is only necessary to discover the operations of this fluid in natural affairs in order to understand every process of creation and every method employed by the Being who created us to accomplish the continuance of all the mechanism of the universe and its constant motions. This most important of all scientific truths is the one we again advance, and the proposition is essential to the understanding of our remarks upon the principal topic of discussion.

The most useful matter of information in the way of the investigation of nature is the understanding that all creation is created from this fluid, and all that is created is capable of being converted into this substance again. It is this idea that is important to obtain here, and all that is necessary to allow one to discover that in the creation of all natural organizations there is but a use made of this agent, and that each creation is only an instrumentality for the further development of the designs of creation.

The triumphant and ultimate creation of the Creator is the human soul, and in discovering what constituted an animal origin

and a human origin, this very ultimate of creation will be discovered. The most useful and instructive object for man to contemplate is the one order of creation that is seen in his own organization. No subject of creation is so capable of affording us a chance to get a glimpse of the nature of all other objects of creation, and in no other can we discover so much of the designs of creation.

Now let us undertake to inquire what it is in a plant that under any circumstances can produce an animal, and when it is discovered it will surely be seen what is produced in an animal organization that can be transformed into a human organization. The influence in a plant that is producing its development is while developing the plant creating a similar organization that will exist when the plant is decomposed.

In this office of electricity the same work is performed that is seen in a piece of mica, or in a piece of shale, or in a piece of the flesh of any animal, or in the cornea of an eye, or in the pores of a petrified log. It is nothing more than a partial solidification of this agent that constructs the plant and every other organization of a natural character.

Whenever a current of electricity flows through any substance so slow as to cause no decomposition of the object through which it passes, or where the current is prevented escaping from a substance in which it exists a consolidation of the influence is sure to take place. The time required for a consolidation is but a few days, or months, in some cases, and in this philosophy all the means of creating our atmosphere is found.

The most startling fact connected with our atmosphere, that can be discovered is the truth that in the oxygen and nitrogen only a condensation of electricity exists. The difference in these gases are only in degree of condensation of this general fluid, and the oxygen is the least condensed. No one can appreciate the importance of a knowledge of this fact until it is seen that in its possession by a scientific world it can be demonstrated that only a grinding of atmospheric gases is necessary to convert them into the original agent, electricity. Of course the atmosphere will require less grinding than metals, hence a generator that grinds only atmosphere will produce the most electricity. This is all the present electric dynamos do.

Let us examine this proposition as to the condensation of electricity. The whole animal world are but condensations of it, and so is man. In each plant a condensation takes place as the current circulates through the plant. In every cell in the plant only a substance for decomposition is created, and it is only a construction from the decomposed substance in the channels of the circulation of the plant. When this substance is decomposed an additional amount of this influenced electricity is given the plant in its channels of circulation and in its escape through the tissues and cells already constructed to the surface it condenses and creates new cells, and these cells constitute the tissues. In the interior of every cell a part of this influence is less condensed, and in this less condensed part of this influence is to be found not only the soul of the plant, but the origin of every animal species. It is the vertible substance that exists when the plant is dead, for when the other parts are decomposed this part will be still in existence. It will decompose too in time. Now, when the hair of a plant is examined through a microscope all that is here described can be seen except the interior coating of these cells. They are so refined, it is impossible to observe them through any microscope. They are only barely more condensed than the atmospheric gases, and they can exist in it without the atmosphere, being in the least affected by them so far as our senses are concerned.

They can be inhaled by the lungs and thrown out in the breath, and it is their existence in the atmosphere, when it is very damp, that assists in creating what is called pneumonia, for when in the atmosphere at such a time they aid the moisture in stopping up the pores of the lungs. Now we will make another most startling statement, and it should be observed by all of our readers for they can ascertain whether it is true. All the pictures of plants so beautifully stamped in the frost on the window pane and everywhere where the congelation of vapor is but a painting of this condition of water. These figures are the electrotypes of these souls of plants, and they will invariably appear like the weeds around the dwelling where they are seen. Greater plants can not imprint their forms on such small places. The same species of impressions are observed on the crystallizations of salts, and are sometimes felt by the more sensitive persons. In each

of these creations there can be seen all there is of substance or manner of creation of a soul of either a plant or an animal or a human being. The same character of objects is eliminated from the body of the decomposed animal, and from the organization of every human being at its death. This philosophy is what is referred to in the Epistle of Paul to the Corrinthians and in other parts of the bible. The description given by Paul of this work of creation is correctly stated in his wise epistle so far as it is described. The incorruptible is the very elimination of the human body that we are describing. The statement of this good philosopher of the fact that the soul is of the Holy Ghost is as true as anything that could be stated. It is a fact that this wonderful agent called electricity is the very holy breath of God that is rendered Holy Ghost in the translations of the bible.

This holy breath of God is the very substance of which the soul is constructed and this great prophet so states.

Now, if our idea of the cause of these stamps of the vegetable forms on our windows, and on other crystallizations is true, cannot we commence the examination of spiritual creations? And is there any difference between spiritual and material creations except in degree of refinement? No more truthful definition of the difference between such orders of creation can be given, and it is as well to admit the fact, that after all, it is only our ignorance that is making mysteries of the more refined and beautiful productions of the Creator.

The most comprehensive of scientific minds are unable to discover what a creation can be that is not composed of substance, and it will never be discovered that there is such an object. In each world of existence there is but one kind of substance, and the same influence that operates the affairs and organizations in one, can, and does operate the affairs of the other.

When a better knowledge of nature is obtained there will be seen that a necessity existed for such more gross conditions of substance, as are denominated material things in order that the great amount of objects to be created could be produced by a vast and comprehensive system.

It was a work of preparation only that gave the observable universe existence, and the whole order of worlds was to afford a vast and appropriate ground for the unfoldment of the more ethereal creations. It was as possible to create the organizations of the earth, one at a time, in the absence of a world, as it was to create a world, and a world is but a great workshop for a wholesale production of the intended orders of existence. This fact should receive attention from every human being. By its contemplation all the creations of our observation can be seen to have a purpose, and all the methods of creation can be better understood.

The evidence of the application of the divine mind in the creation of animal and human forms will be so plainly seen in the future part of this work that it will not be denied that the whole universe was the result of a design, and the purpose of an intelligent influence. No scientific author is going to deny what we shall state, and it is this assurance that is going to afford a different and more comprehensive examination of our subject than is given it in the works now in the libraries of the world. When it is all before our readers it will be our wish to obtain their view of this statement.

In these phantoms from plants and animals there is neither life nor consciousness. No animal is allowed a place in a world that is created solely for a human soul, except in the shape of a lifeless emanation. The reason why they do not possess life, will be stated in the further examination of this work. They are but lifeless creations, and serve no other purpose than to enable the Creator to organize a better order of animal life from them. It is this very work of creation we will undertake to delineate.

These good beginnings in the way of animal life are the actual germs of life in the atmosphere, which the scientist and doctor of medicine are confident have an existence.

Every cell in these phantoms, from the planet or animal, is capable of affording the atmosphere or water with insect life, and every insect in the world was created originally from one or more of them. No matter in what substance, or in what part of a substance, the insect may be found, it is obtained from one or more of these phantom cells, and all unorganized insect orders are created from them now.

It is a fact that even in areolites that are thrown on to the earth, the simple forms of

insects are sometimes seen, and they were impressed on such bodies when the areolites were condensed. In their condensation these insects were obtained as our fossils were obtained in the formation of rocks from the deposits of mud and sand of past ages. The areolite shall receive further attention when the problems of astronomy are discussed.

Now, if we can discover what produces life in the soul of a plant cell, or in several of them when united, it will not be such a very strange thing to discover that life is developed of considerable significance from a greater amount of the same kind of material. We shall find it to be the case that from these phantoms of plants, all the animal species had their origin.

What a surprise to a teacher of science it will be to have the fact established that in the atmosphere around us is a world of substance from which all the beings on earth including the human family are created, and that from this very character of substance the whole animate world is replenished by all the organization of life that are coming into existence. The fact is sure to be discovered and in this article enough of the evidence of its truth will be pointed out to enable any person of good understanding to discover all the the truth connected with it.

Every object on earth possessing life is only a clothed emanation or phantom of a plant or an animal that has decayed. In this very astonishing revelation all the causes of the differences in species in animals, and of differences in races of the human family, and difference in the appearance and habits and characteristics and sizes of members of the same race is to be found. Mr. Spencer is to be able to find an explanation of all the differences in the characteristics of the same race or nation in any country by an examination of this important fact. In every phantom of the character described a most useful and important office is offered all of the many kinds of plants that appear to have no office to fulfil by their existence, for every one of the eliminations from them of the character we have described, is employed in the creation of the animal world. This is so well ordained as the generating source of life that to destroy the development of a plant is to destroy the possibility of some animal existence.

The most wonderful and interesting facts connected with this truth are to be disclosed, and when the world is in possession of all the philosophy of this character, and all the attainable facts of its truth, the establishment of the most pleasant and acceptable conditions of human and animal life will be found to be within the power of the human race. Let no one who reads this new and startling statement be surprised or at all affected by it until they have observed the evidence we are to offer of its truth.

Now, it will be our duty to investigate for a moment the character of life, before we are able to be understood in what will be stated in reference to the *modus-operandi* of the creation of original species.

All of the thing called life is to be found in the mere possession, and action in a body of the influence called electricity. This very subtle and active agent is all that can produce any life in any object or organization. No possible construction of any kind of substance can give even the slightest motion, or possess any one of the capacities of either life or action. No other substance is able to convert an atom of matter into an animated thing. No other substance is capable of giving any construction the means of operating itself, and in a word no other substance is capable of being impressed with or what constitutes a thought or a constant affect of objects which constitutes a mind. It is all there is of power of motion and capacity for impressions, and these two capacities are all there is of life.

In our work, lately published in this paper on electricity in the human body, all the evidence we can now desire our readers to possess concerning the means of producing life in the bodies of man and animals can be found. In this article it will be inappropriate to repeat it. Let the readers of this work obtain back numbers of that work or the pamphlet in which it is published.

In each of the atoms of our atmosphere there is only a little globe very much like the one we are on. In each of these globes their is a great amount of life, and it consists of nothing but electricity in the interior of the atom. These atoms are constantly decomposing, and their places filled by new creations of the same character. In each atom of substance in our water a similar operation is going on, and in each atom of our bodies,

and in each atom of all bodies this constant process of change is in operation.

Now ,when one of these atoms are discovered, if they ever can be, each one of them will appear to be little animals. In each of the cells of the plant, or animal, or human body, there is an equally active operation of this kind. In each of the cells of these phantoms that are evolved from both plants and animals there is just as active an operation of this influence. In each cell of these creations there is a capacity for growth as well as decomposition. The growth or decomposition will depend on the substance around such germ-like creations. If the substance is wanting, only a decomposition of these etherial bodies takes place, and if the substance around them is sufficient and suitable, they will be developed into animal creations as large as the character of the substance will permit. In this philosophy of acquiring a body capable of observation the great animals of the earth and the whole world of smaller creations had their origin. This great order of unfolding life in different forms is ever the same, in any manner or place of its creation, whether in the egg of the crocodile, the womb of the animal or human mother, or in the warm water or warm and filthy atmosphere. The warm and decomposing egg furnishes the appropriate substance for clothing the phantom obtained by the egg in the office of copulation of the female and male reptile or bird. The womb of the human or animal mother is only another suitable opportunity for a decomposing substance to be appropriated to the clothing of a phantom of an animal, while it is being transformed into an original or a human organization. The very same philosophy that enables a cell of a soul of aplant to germinate a micrococcus or amebae in warm and decomposing water is enabling a mother of the human family, through the instrumentality of the bath-room in her loins to germinate a human child from the soul of a brute, and the substance of the decomposing ovaries in her sides. This part of our work shall receive further investigation as we proceed.

The aggregation of substance around a plant cell or its soul, which creates what is considered an insect, and the aggregation of substance around an animal soul in the womb of a human mother, or the aggregation of substance around a plant soul in the womb of an animal mother, is in each case a mere operation of attraction in all respects like the operation that causes the small pieces of metal to cling to a common magnet, and this work of attraction is the same that makes the swinging planetary bodies adhere to the planes of their existence, or the waters of the oceans to cling to the globe. Until the object of generation is capable of acquiring a substance through an organized digestive arrangement that enables it to be increased by the ordinary process of growth, this good agent of all creation affords it a clothing or body, only by its influence of attraction and maternal power.

Now, when a plant or piece of animal matter is decomposed in warm water, or in atmosphere that is damp and warm, this phantom emanating from it will become possessed of this power of attraction, and so will each part of it, and every one of these creations in our atmosphere would become animals as large as the phantom of the plant or animal that is decomposed, if they were allowed sufficient substance and time to accomplish such a clothing process as we have described. We shall soon see that every species of animal and organization possessing life had their origin at a period of the earth's existence, when the water and the atmosphere afforded just the substance and therefore the very instrumentalities for the generation of the whole kingdom of animal creations. The only thing that prevents a whole multitude of crocodiles and aligators, wolves or other animal forms from appearing in our atmosphere as partly regenerated animals, and the only thing that prevents a great ocean of plants from assuming a spectre-like form in the atmosphere, is the absence of the necessary substance in the atmosphere to give them a clothing capable of being seen.

In the earlier days of vegetable development the air and water was filled by the gases and decomposing organizations of such rapidly developed vegetation and the immense amount of the filth thus generated was the substance from which the fish of the ocean and the creeping reptile of the land, and the whole order of animals in the air and on the surface of the earth become possessed of their original organizations. In this condition of the atmosphere and water a vast womb for the generation of the origin

of all animal creations was established. Nothing more was wanted to convert such a great zone of unappropriated substance into a world of animals than a form of some kind of substance around which such matter could be attracted, and in these decaying vegetable organizations every form for the construction of the whole animal creation was found; they were only the soul-like emanations from such plants. The different species of animals are but the further development of the souls of such vegetable organizations, and they are in every instance but mere representatives of the order of creation of plants that preceded them. The very same philosophy that creates a microscopic insect in a moist and warm atmosphere or in a warm and decomposing body of water gave existence to the crocodile, the cave tiger, the fish, the bird, the snake, or any living creature. The fish of the waters of the earth are but the better development of the ferns and other plants that fell into the water, and such as were developed at the bottom of such bodies of water. The animals that were given being on the land were but greater developements of the vegetable organizations that decomposed on the land. No one of such species fails to exemplify this fact, and in each of the forms of these species of animals can be seen the antitype or copy of a certain vegetable organization. The resemblances of each species to its archietype shall be pointed out as we proceed in this work, and the reader shall fully observe the very origin of species. Whenever a creation of animals is found on the earth, or in its atmosphere, there can be found also a plant that afforded it being. If the plant was a marine production, or if the plant was decomposed in a body of water, in this element of water only will be found the greater development of the plant organization. If the vegetable was decomposed on the land, its representative in life, it was capable of being converted into, is also found on the land, and if the animal is a creation that occupies the air and sits on the branches of the plant when it is obliged to rest, the origin of its existence will also be found in the air, and resting on the branch of a plant. This is the case, with respect to the character and the origin of every bird that has existed or exists to-day, and their origin is found in the similarly bedecked blossoms on the vegetable creations.

Now we can begin to understand why large animals are not generated in water and the atmosphere to-day, and why all such animals as are capable of reproducing themselves were given their origin so long ago, if we can for a moment reflect on the fact that all the substance by which the atmosphere and water of the earth became so impure was in many long periods ago converted into the origin of species, and that neither the atmosphere nor water of the earth at this period furnishes the requisite substance for clothing the unseen creations of these emanations, as the same kind of creations were clothed in the earlier days of plant development. The atmosphere and water were made pure by the employment of this ocean of filth and gases in the construction of those wonders of creation called origin of species, and which are supposed to be found in the work of the celebrated author of evolution, who states that all that can be known of such origin is the possible change of form of what was originally constructed of animal forms. He does not attempt to ascertain the origin of species, and at most he only attempts to learn the commencement of some of the later forms of animals.

Let us assure the reader of this paper, that in the clearing of the atmosphere and water of the earth, when each of these elements were clouded with the filth of decaying plants the roll of animal creations was filled for all time, except in the case of the spontaneous generation of insect and worm life. The catalogue of animal forms was then established, and its description, is the description of all the forms of animals that the divine mind ordained for our earth.

In what can be seen of the generation of life to-day of a spontaneous character can be observed the mere repetition of the process that gave being to the vast and original animal creations of the deep and the land and the air, and the very influences that gave a crocodile existence on the warm and muddy banks of the Nile, or the vulture on the cliffs of the mountain, or the fish in the warm waters of the ocean, is to-day giving life to the insect that comes into existence in the warm mud on the bank of a clear river or the Katydid on the bough of a tree, when the leaves are decomposing, or a mere amebae in the warm and stagnant water in the kitchen. The difference in the size of such creations,

is solely the result of the difference in the amount of filth and slime and gases that give such organizations a beginning in existence, only one philosophy for creating life was adopted, and no observer of the works of creation will claim there was more than one.

Let our readers also remember that in this difference in the condition of the atmosphere and water of our globe, the means is found for the degeneration of the more obnoxious creations of the animal kingdom, and the greater intelligence and happiness of our own species. The reptile is out of its element in a clear and pure atmosphere, The other orders of animals are being degenerated just in proportion to the purification of the atmosphere or water in which they exist. Man, the apex of animal creation, is given a wider birth by the decrease of the obnoxious animals, and at the same time is allowed a clearing of the mind as fast as a clearing of the atmosphere takes place.

In the next chapter of this article our readers shall have an explanation of the process of the generation of life, in such phantoms or souls of the vegetable kingdom as we have described. This very beautiful and almost spiritual work shall be so faithfully delineated, that all can see who understand the statement, why only a substance to contain, and a current of electricity to operate, are when in the condition of such operations, all that are necessary to give the two objects the character of one living being.

Chapter II.

The previous chapter on this subject was closed in our statement that in the emanations from the plant and animal kingdoms the origin of the different species of beings were to be found, and that in the present period of the world the creation of all the small creatures that are brought into existence, wherever a considerable amount of gases and impurities of water or atmosphere exist, is in all respects the same operation as the method employed for the development of the great animals of the earth in the past periods of its existence. Now we again state that in the creation of an insect in a decomposing atom of any substance, the same philosophy is operated that produced a crocodile, a fish or any animal that has ever existed on the earth. The old whale, and the younger creation, the elephant, were as easily created from a mass of decomposing animal and vegetable substances, as the ugly and somewhat similar animal in the atom of any rapidly decomposing substance, and these greater creations required only a greater amount of substance of a similar character in order to allow them a beginning of existence. No animal of the earth was ever much larger than the largest plants, and no insect was ever created that was smaller than the cell of a plant or animal tissue.

The only animals that were greater than the greatest plants were members of the whale and elephant creations, and in their organizations can be found all the evidence of a result of the employment of a greater amount of animal and plant decomposition than was employed in the other species of animals.

In this evidence a most astonishing amount of facts are to be discovered, and when it is investigated the present idea that a mere operation of the transmission of peculiarities of organization can produce a distinct species of animal will be so plainly seen to be a mistake, that it will soon follow the march of all overthrown theories.

In the previous chapter of this work, we also stated that we would describe the modus operandi of the conversion of the phantom or soul-like emanation from a plant into an animal. This promise we will keep, and the operation is sure to be seen if this explanation is correctly given. In every change of a cell or a tissue into a living being there is only an electric current, from the water or atmosphere, obtained by the cell or tissue that affords it life and motion. By the possession of this influence is life established and motion a possibility. In this object it is performed as we see it performed in a common magnet. It is only a better operation of this old agent of creation. It will be remembered that we stated that at the death or decomposition of the plant, a creation was evolved that could be given both life and motion, and that it was the soul-like lining of the little cell that constituted the soul of the cell, and a union of them the soul of the tissue or of the whole organization, and that the power of this kind of creation to attract unto itself a substance was what gave it the ability to grow and to become capable of being seen.

The truth of this statement has been de

monstrated in the experiments already made in divers ways by Mr. Tindall and several contemporaneous investigators in England and in this country, and without their knowing what an important philosophy they were uncovering.

In attempting to establish the claim that no spontaneous life or animal was possible, and that the germs of life existed in the atmosphere either as animals or as eggs capable of developing life, they actually proved that the production of life everywhere was only an effect of a current of electricity operating on the soul of a plant, and that the soul-like productions of the character we have described are the germs of all animal creations. Now, in their experiments they only enclosed vegetable and animal substances, and applied such heat to the instrument which enclosed the substance as would decompose any ordinary substance or about four hundred degrees Farenheit. The substance was then allowed to cool to the ordinary temperature of the air. The object was to discover if the germs of life were in the substances that were confined in the instrument, generally a bottle, and from which the air was excluded; and it was believed that if the fact was established that this subsistence, after such heating, could not be given animal life or appearance of life, it could be claimed that the atmosphere furnished the germs of life, and that heat would destroy them, or that if the germs of life were in these substances the heat would also destroy them as well. The object was also to find, if possible, what the germs were. The apparently miraculous result was that life appeared in these substances in the same manner as though no exclusion of air or heating of the substance had taken place.

In each of these experiments, as we are informed, the only possible information that these investigators could obtain was, that in these substances there must have been some germs imparted to them before the completion of the cells or tissues took place. No one is going to deny this, it is just what we are attempting to establish, and the object of this article is, among other things, to show that, in all cells and tissues of the organization of every plant and animal, a germ is created in it capable of another condition of life.

The heat having failed to accomplish the destruction of such germs, Mr. Tindall applied an air pump to the bottle, and pumped out all the air possible before decomposition of the meat or vegetable was begun. The result of this operation was the failure of the production of life as it had been produced. It was therefore claimed more determinedly than ever, by this investigator and others of similar opinions, that the germs of life were in the atmosphere, and this conclusion was arrived at only on account of the absence of any knowledge of the fact that in pumping out the atmosphere from the instrument containing the substance, they also pumped out the electricity that afforded the life to the cell and tissue, and the very thing that is to-day giving these investigators their thoughts and their lives.

Only a knowledge of the fact that electricity was the thing that established life, was necessary to enable these teachers to discover the germ in these substances and the cause of the life they were capable of manifesting.

In each cell a construction of what appears to be arms or legs or feelers is obtained and seen in their operations. They are but protrusions of a part of the cell and are withdrawn when the cause of the elongation is removed. They are parts of the cell extended toward some object in the water or air that attracts them and instantly recoil when the attraction is gone. Their own power to attract is all that gives these germinating phantoms a covering sufficient to be observed. In each one of these items of life we behold the most positive evidence of the application of the divine will in the creation of the original of every species of defined animal organizations, for only in these little atoms of animated substance, and in the larger masses of a similar kind often seen produced in a night on the cellar wall or in some gases of a decomposing substance, is there a production of any creature that can be considered an animal without the application of an intelligent will or mind. All other orders of animals, whether insects or greater organizations, could not have been produced solely by the operation of law. The very organs of reproduction in such animals as possess them are very substantial evidence of this fact if no other could be found, for their construction was for no purpose but to relieve the Creator from a repetition of the work of this character of creation. It is possible to discover what the evidence is of a design and the application of the mind of God in a work so wonderful as an animal or human creation. No where on

earth can it be found that a creature of merely spontaneous origin is capable of causing a reproduction of its kind; nor can it anywhere be found that such a spontaneous order of creation exists but a few days. Nor can it be discovered that a work of spontaneous creation is capable of having any other development than a merely attracted amount of gases or particles of substance as small. Nor can it be discovered what is going to enable them to become anything more. This is all that need be said of the fact that all organized and self-producing animals were originally the handi-work of God, to the extent of their organizations.

In their creation only a similar substance to that operated on in the creation of the amœbæ or any insect creation was necessary, but an intelligent mind was necessary to establish the organization.

Let all who are so jubilant over the tissue of sophistry seen in the so-called Darwin hypothesis of animal evolution, find, if they can, a single animal definitely organized and capable of reproduction by its own labor, that is ushered into existence through the operation of law! Let them discover, if they can, a plant that is not represented in the animal world by a creation whose organization can be found in a convertion of what a plant evolves when it is decomposed. Let them find, if they can, a single insect or animal that is not antedated and prototyped by the existence of a plant! Let them find, if they can, a single evolution of an animal from anything but a plant; and, finally, let them find a work of God in any organization of the animal kingdom that is not absolute evidence that the Darwin theory of evolution is false.

Let us ask all scientific teachers of any land to examine these propositions and give us an answer. We are anxious for no fame for our discoveries and expect none. No one but a popular author is able to attract any notice for anything accomplished in the way of science, no matter what it may be. Now, as this is so very unjust and so unpleasant to all who are willing to work for a popular object, it is as well to contribute a little ourselves to the fame of others before we complain of injustice to ourselves. The late Mr. Darwin was about fifty years of age when he advanced the so-called theory of evolution. He was twenty years preparing it. It has survived about twenty years and it is now about to be buried. What funeral honor shall we pay to the author and to the theory? It should be that the author supposed he was right. He never asked anyone to believe his statements. He is dead, and so is his theory as soon as the evidence of a better one is seen by the world. Now, let us say of his work, that it was an honest, painstaking, able production of a great mind and honest man. This is our encomium upon the work and him. It is all that the work and the author are entitled to.

The most wonderful of the accomplishments of this great man, is the fact that in all his years of existence and examination of the works of the Creator, he could abstain from discovering any evidence of a design or intelligence in the operation of these works; and it is in no sense a disrespectful remark, if it is stated, that it was necessary for him to overlook all such evidence, as it would at once overthrow all his ideas of creation if recognized.

Now let us look at some of the evidence of the fact that the soul of a plant is capable of being converted into an animal. No one will deny but the animal was created from something. No one can deny that if the soul of a plant was not the thing from which the animal was created it must have been from some more gross material, and if the creation was from more gross material a greater amount of matter than exists in a plant, or a greater object than any plant was employed in the constructien of the elephant or whale, and as there are no larger objects except pieces of rock or portions of the earth they must have been created from such substances. This fact, of course, would render the operation far more miraculous than the theory we are advancing. It would require not only a creation from the most gross and undeveloped substances, but a change in all their conditions.

Nothing of the character of either is found in any animal except in a different state. If it is claimed that a small creature, an insect, for instance, was increased to produce any of the immense animals the difficulty is still greater, for the insect is a very different organization, and the material of their organizations is widely different also. Besides this they can be made larger only in the way of growth, and their growth is not capable of

changing them in respect to size or form. The facts show that instead of the animal species increasing in size, they are invariably decreasing; and the insect is no exception to this law.

And beyond these obstacles in the way of such a creation of the greater animals, or of any animal, the creation would require a miraculous operation far greater in extent than what is suggested in the theory we are advancing. No one will deny that in our idea of the origin of the amœbæ or spores of life no intervention of a Creator was necessary, and it will not be denied that our idea of the creation of greater animals is deprived of a miraculous character to a great extent, for if our hypothesis is correct we are able to discover the preparation of an appropriate substance for such creations and a law sufficient to accomplish their transformation and accumulate a covering for them, at least for some portion of them. All that is in any way miraculous in the operation we are describing is the application of the divine will in giving the definitely organized animals the means of perpetuating their existence. Where are we to discover the origin of an organization of any creature, if it be not in the work of a Creator of calculation and intelligence? Does the hypothesis of Darwin afford us an explanation of the origin of the philosophy of circulation, or the construction of the respiratory organs, or the digestive arrangement? Does it afford us an explanation of the origin of the means for the construction of cells and tissues, the bones and eyes, the teeth and hair? Does it explain why the action of the organs on which life depends each moment are placed beyond the volition of our minds, or does it inquire even as to the origin of these accompaniments of organization? No one is going to say that in his work the origin of a single species is found, and much less will any one claim that an original being or basis of evolution is found by this teacher. The work should be called an attempt to account for the diversity of species, for that is all it is.

In our idea of the origin of life these objects of wonder are accounted for, and this will be more plainly seen as we proceed.

We will here state that the reproduction of animals is impossible without the employment of exactly the same character of creations that were employed in the creation of their origin. The use of a soul of the plant is as necessary in the reproduction of an animal as in the production of its origin. This most startling proposition is as easily established as the existence of the animal. The proof is abundant without experimenting, and if doubted, the experiment will be sure to satisfy the most stupid or bigoted denier of our statement. These remarks are equally applicable to the reproduction of the human family, so far as the use of a created soul is concerned. No truth of more importance to the well-being of the civilized world is to be advanced again in the existence of the human race.

On a knowledge of this fact all the prisons of every State are to be emptied, and the character of civilization so improved that a millineum of better things will follow. The government and people can discover why an Indian race is passing out of existence amidst the gazes of a better race, and why a small portion of this miserable people are prepared to till the soil and become civilized, while their kindred in other localities are swept off the earth as by a simoon. The cause of the differences in statue of such people as live in the country and those who are born in the city can be discovered. The cause of a brutal head and countenance on the shoulders of a great portion of our Celtic brethren can be found. The cause of the creation of a camel's nose and whiskers on the faces of Jews can be observed, and the cause of the existence of such a great number of insignificant and good-for-nothing men and women that are crowding the streets and tenement houses of every large city, and with so little intelligence as to get only a starving pittance from the world or their employers will be also seen.

It will also be seen why the degraded Italians that come to our country are such dwarfish and stubborn beings, and why a Dutchman has such great muscles and great stomach.

Now, when the evidence of this work of creation is disclosed, the world is sure to allow the doctrine of evolution to go to the wall, and a better evolution is sure to be seen and admitted, and it will be a philosophy in perfect harmony with the fact that in all the affairs of nature a work of intelligence only is going on.

We are far from declaring that the mind of

of the Creator is in actual operation in all the affairs of growth and change in the things of creation. We only claim that in such affairs and operations a work of divine ordinance is being performed.

Of the transformation of the plant emanation into an animal there is the most abundant evidence in the resemblance of every animal to one species of plant, not only in form, appearance and color, but in what may be called character or characteristics and manner of accomplishing the offices of life. It is sure to be admitted if it is carefully observed.

Let us commence the examination of such resemblances in a portion of creation. In the most of the animal organizations now existing the resemblances are easily discovered, and the principal animals are familiar to all the world.

In the insect world such a great variety of species exists that it will be impossible to detect the origin of each, but with respect to the greater animals it is possible. The idea that the institution of forms of original organizations by an application of Divine intelligence is impossible on account of the great number of such organizations is not a valid objection to such a claim, for the whole number of animal species on earth, or that have existed, is so greatly less than we are apt to suppose that this answer to our idea of creating each species by a separate creation is of no weight. It is not possible for us to state the exact number of animal creations, but it is not so great that it could take more than a century, at the rate of one a day, to construct the origin of each species separately, and if it is not correct to state that it would require but a few days to accomplish the entire work, let those who deny it inform us what time it required to create all the different species by the process of evolution, and how long it took to create the order or orders from which they were evolved. There are many species that are similar in form, and only a slight amount of influence was operated to create the difference between them. This is also true in regard to insects. Now there are less than one million different animals on earth, and less than one hundred thousand that are actually different in all respects. There has never been an animal on earth of which there is not still a representative, and the evidence of this fact can be seen in its existence. This is already observed in scientific circles, and the proposition given much credit.

Let any one who is astonished at the idea of a special interposition of the Divine mind in the establishment of animal forms and organizations, except what is given them in the plant creation, count the different animals of any size, on our continent. When they are counted it will be found that in the number there are a great many exactly like some of the animals of other continents, and belonging to the same species, and when this fact is observed it may be seen that the most of them were transported from country to country, and when this is seen the kinds that are indigenous to our country will be found so few that they can all be numbered before counting one hundred. No man on the continent can count one-half of this number of different animals indigenous to this continent only.

It could not take a great amount of time to create an insect, for insects are the most dissolvable kind of creations, and it was only a device as to form that was necessary, and in giving them organization, and all insects are the same in form to some extent. What, then, becomes of the objection that so great a a number would preclude the idea that a creator of the universe could establish these different organizations. It is an objection of considerable less significance than the objection to a creation by evolution, and it is as easily removed as such a theory is. No one will for a moment pretend that a horse can now be converted into an elephant, and why claim that it was ever accomplished; and why claim that the horse was a production from the iguandon or any other hideous creature? Is it as necessary to find the origin of the horse as it is to find the method of creating the great creature from which its descent is claimed; and why associate so beautiful a creature with a partly developed reptile. It is only a makeshift for the want of more understanding of the great problem.

No one can be deceived in the actual origin of animals when a simple method of the creation of all animals is explained. No one can be deceived by the evidence afforded of a correct theory. It is seen indelibly stamped in each creation. It is exhibited also in the actions and character of every living creature. It will remain as substantial

testimony until the human race is blotted out, and this will occur when the creations below it are extinct.

When a human embryo is complete, the origin of a human creation is extinguished, and when this embryo is allowed a dissolution a human soul is evolved, in all respects like the one from which it was a result, except in form and intelligence.

When an animal embryo is converted into an animal, its origin is extinguished, and in its extinguishment only a grearter development is accomplished, merely a transformation of a plant emanation into an animal.

This change of such creations as are now described into the next order of life is only a mere operation of the agent of all creations, and it is in this work-performing that evolution of a lower to a higher order of existence of the vegetable and animal worlds, that to to this day is overlooked, or, rather, has never been observed, and which can, when understood, give all the human race a chance to comprehend the way a lower order of creations can be converted into a higher order and why the lower order was necessarily in the plan for the creation of a higher.

Now we will begin to see what the world has discovered of the work of the Almighty in the way of evolution, when a little more disclosure of the work of nature is made that is to be seen in this article.

Over two thousand years ago a Macedonian philosopher of great power of thought could observe that each animal of the earth was in some way related to the vegetable kingdom, and in a way that produced a strong resemblance between species of plants and species of animals, and he advanced the hypothesis that a whole animal world was an outgrowth from the vegetable world. All that has prevented mankind from constantly claiming this fact is the inability of the investigators of the problem to learn what possible operation could convert a plant into an animal. It is only a knowledge of the way the work is accomplished that is needed to allow this great author of a correct theory to be given credit for teaching a truth that no discoverer in the world up to the present day has been able to see.

When our readers are contemplating the inquiry as to the wisdom of our theory, let them remember that in a great mind of the Grecian age a similar doctrine was propounded, and the author was made immortal by his wisdom. He is the present stagerite of science, although a thousand errors are discovered in his works. The great Aristotle would not be considered a mere speculator in our day, and if this work was from his pen the theory would be accepted from border to border of civilization.

We will now commence the pointing out of the evidence of our theory of the nature of resemblances of one order with another, and of one species of plants with one species of animals. It has been deferred to this point of our comments in order that the reader could obtain a better glimpse of the relation of one kingdom of creation to another.

Now, we will look at a whale and see if it is not possible to discover something of its origin.

What could create the original whale and afford it life and organization?

This seems at first to be incapable of an answer, and yet it is as easily answered as any inquiry of a scientific nature.

The origin of the whale is no more a wonder than a creation of about the same shape that is wholly produced in one summer night in a mass of gases in the filthy and warm atmosphere of a cellar, and after several plants have decomposed in the yard about the premises.

It was created originally in precisely the same way, and it acquired what organization it possesses by the assistance of the Creator.

The gases from which it was constructed were produced from the decomposing bodies of animals and the plants that were rolled into the hot waters of tropical shores.

It is as much the shape of such a heap of stuff as anything well could be and be an animal. Its origin is to be seen in its construction. Every whale is filled with the transformed plants that were decomposed in such drifts of the ocean, and every whalebone that is seen in the jaws of this monster is a good exhibition of the creation of bodies from what a plant evolves. The very species of plant is seen in the whalebone of its jaws, and the shape of the plant is also seen.

In the origin of this monster there is both plant and animal. It was impossible to create such a great creature from either of these substances alone. It could not have been wholly a creation from the vegetable world. Let our geologists examine the whale's pad-

dles and jaws, and give us their opinion of the resemblance of these tapering organs called whalebones to the old order of ferns that they declare were the only plants of the earth at one period of its existence and which was before or at the same period of the creation of fish. Let them compare their tissues and fibres and branches with the tissues and branches and fibres in fossils of ferns. No one can doubt the origin of all these curious accompaniments of the whale's organization when this comparison is made. A fern will be seen in every organ of this character and a better idea of the character of the whale will be the result. Let the investigator examine the teeth of a whale and discover if possible a resemblance in them to the teeth of the mammal.

What, let us ask, could create a good imitation of a fern in a whale's mouth if it was not a plant of the same character and form? If it is answered that the plant could not be so changed or operated on, what is to be accepted of a theory of evolution that is only a claim that a whole world of animals is the result of a change of form, and by the earlier forms being operated on by independent influences.

The theory that is claiming a conversion of any animal into a whale is but a mere attempt to construct the most absurd idea of the possibility of a natural work of the Almighty being defeated or changed by the very means that were employed to prevent it, and this is all that is established if the so-called theory of evolution is correct.

This great creature, the whale, is but a formation from the decomposed plants and marine creatures that were rolled into a warm corner of a tropical shore, and every part of the animal is a construction from such emanations as these substances were capable of evolving.

Where could a whale obtain the construction of its organs and its great dimensions if its origin was not of the character we are describing?

What was there in any animal that could be transformed into the organs of this monster by any such operation of development as is supposed possible in the theory of the evolutionist?

Now, we will undertake to point out the origin of that great creature of the globe, on whose back the people of a wonderful character are able to ride, and whose attachment to the people it is constructed from is as strong as that possessed by these people for each other.

The great and human-like forehead of an elephant is a good example of the cause of its intelligence, and in nearly every part of its body can be found what will explain the nature of its origin. Its shape is as near like the thing from which it derived its existence as an animated mass of substance can be, and when it is moving the very picture of the ground it was under is carried on the legs of this animal. If no work of creation or of animal organization is there, so much of what may be considered positive evidence of the truth of our theory as there is in the construction of this great animal.

The elephant is a great combination of the decomposed bodies of human beings that were buried in heaps in the countries where the elephant is found, and whose grave was the same shape as the body of this animal. These mounds of the dead are all allowed a way of being caricatured in this animal's existence. The feet of this monster are only so many descriptions of the toes and paddings of the human beings that were supposed to be waiting a different resurrection. The joints of its legs are only a clumsy caricature of the knees of human inhabitants of the plains of both Asia and Africa.

Its great trunk is only a probosis of two offices instead of one, as seen on a human being's face, and if the arms of the creatures whose bodies were piled in a commoon heap could have been spared from the work of supporting such a great body, a trunk of such proportions would have been omitted.

In this animal's eyes there is a copy of the eyes of the cunning creatures that were casting about in the same way for the wherewithal for their existence, and it is just to this noble animal to admit that in the greater size of his eyes, there is something more than an exhibition of a mean soul. Let the believer in the Darwin hypothesis stare into the eyes of an elephant and ask himself if in those great and human-like objects of sight there is not a considerable resemblance to the human eye?

No sophistry is capable of destroying the evidence, and in the wisdom of this creature, only a mind corresponding in traits to the human mind is exhibited. The affection of

this creature for those it is accustomed to be fed and favored by is as great as is seen in any native of the countries of its origin. Its breasts are in all respects like the human breasts, and the female is capable of giving her offspring a grasp of the very instrument which on our mother's faces is only able to touch the object of their care.

Wherever a people were in the habit of burying their dead in mounds in past periods of the earth the elephant is a production of such country. In no country wherein a mound of the human dead did not exist can a creature of such a character be found. The most abundant evidence of the fact that the elephant was a creation considerably later than the creation of man is already found, and in the future a still greater amount of evidence of the fact is to be discovered. In each country where this creature exists a difference in character and construction is seen corresponding to the character and organization of the earliest people of such countries, and even the complexion of a people of a country is exhibited in the complexion of these creatures. In India the elephant is much darker than in Siam, and in the color of the elephant of Siam only a correspondence with what produced it is seen. The elephant of any country, and the mastodon is but an elephant of a cold country where a clothing of hair was necessary, will exhibit, as far as they can be exhibited in such an organization, the same traits of character as those possessed by the original inhabitants of the country.

If our theory of this creature's origin is considered error and a result of the imagination, will those who claim this give us a better theory of such a creature or origin, and will they give us some explanation of the process of evolution that will evolve a monster like the elephant from any of the animals of the countries where the elephant is found?

Let any reader of this article ascertain from the works of the great naturalist, whose bones are corroding in a vault under the altar of the proudest church of Europe, what animal an elephant was evolved from, or where the creature obtained its eyes which sparkle as the human eye, and where it obtained the breasts of a human character, which are located as the breasts of the human mother are?

No attempt at explanation of such wonders are seen in this work, and the significance of these most instructive creations did not occur to the mind of this author. Everywhere in this great author's work where an opportunity was offered to point to some similarity between a creature and an order that was less developed, it was sure to be improved by a note of the fact, and although a chance to discover a perfect evolution of a lower creation in the forms of so many animals was offered this laborer in a scientific work the fact was never seen by him. He had only to compare the animal kingdom with the one that preceded it to discover what gave existence to the higher, and if with the possession of this knowledge he could have understood that the work of creation was not all within the view of the human eye, but of a character capable of being investigated, he would have given the world a great revelation of the methods of creation.

No order of creation is so marvelously constructed that its good office cannot be ascertained and its creation delineated.

Now, with the exception of the whale of our oceans and the elephant species of the land, no animal in the water or out of it is existing at the present time, and no animal ever did exist of greater size than the largest trees of the globe, and if this is denied let a comparison be made of any animal of the earth with the greatest trees, and if it is a fact that the animal is smaller than the largest tree only a very necessary result of the transformation of the tree's production is seen. In all the parts of a beast as degraded as the reptile is or was in past periods of the earth's history a mere improvement of a great log with bark and branches is exhibited. The cayman as it scrambles from danger into the stream is little more than an animated plant of the character of a small tree without foliage, and our alligator as it clings to the creation that gave it origin, the log on the bank of the warm river, and plunges off at the approach of the destroyer is but another picture of the creation of life from a plant, and this reptile, as it sleeps bending over a heap of rocks, as it frequently does, looks as much like a log of the same size that is broken over a similar heap of rock, and decaying with its bark around it and in bunches like the shell of the reptile as any

one would care to see, and if the traveler was not acquainted with the appearance of this reptile he would be very likely to step on what would appear to him a broken and decaying log with its bark still on.

In the development of this creature only the same philosophy was operated to afford it its bark, that was giving its source of existence its bark, and when we are explaining the development of the different organizations of animals this operation is sure to be seen the same in one as in the other. No other work on the origin of species will possess the cause of this resemblance of the bark of the alligator, to the bark of a pine tree; and in the mere fact that we shall disclose of the cause of this resemblance can be found a key to unlock the mystery of animal creation, and give the scientist admission to the record that places all orders of animals in their appropriate places in respect to the period of their creation, and which will afford such teachers a means for discovering why a whole community of a species are created in a particular part of the globe, and why alligators are somewhat different in shape from the gavial of the Ganges or the cayman of South America.

In the next chapter a continuation of comparisons of animals with plants will be given, and we promise the reader a more instructive and more important and more interesting chapter on the origin of species than any that has ever been published.

Chapter III.

In a conclusion that a world of animals is but an outgrowth of a kingdom of vegetation, there is but a mere recognition of a law of progress.

In the conception of a growth of one order of creation as a necessity for a production of one that is more developed, there is a mere acknowledgment of what should be called a preparation in an order of creation for a still higher order of organizations.

In a great and sweeping philosophy of utilizing one order of the productions of the earth, by their employment in giving an opportunity for existence of the next course of development, there is but a mere system of preparation as the work of creation is carried on.

In obtaining what one order or kingdom of creations is capable of preparing, and converting such preparations into what is only the greatest change possible in the way of progression, is only the wisdom that is exercised in the affairs of man, in the creation of what will increase his comforts, and well-being. Only a common amount of wisdom can be observed, so far as the mere plan is concerned, in the philosophy of the unfoldment of the plant, animal, and human creations that is proposed in this work. It is merely the necessary method of creation, and this is all the comment that can be bestowed upon the philosophy, either as a name or as praise.

In every creation of these three kingdoms of existence there is but a copy of a well considered design, and when the period arrives in which man can understand that a designer of all the universe is actually in existence, and occupying one of its spheres, and that it is still a task to continue the operations of all nature, it will be possible for the human family to discover the entire purpose of every organization on earth.

Now, with this additional admonition of a development of an animal world from a vegetable world, we will continue to point to the resemblance of one order to the other, and what constitutes one character of evidence of the facts that are proposed. No animal was ever created that was permitted to control the organization of its offspring, or inaugurate any change of form, or means of acquiring an existence. Whatever the changes in character or form that were permitted in the offspring of any animal, were only as many faithful representations of a parent that belonged to another species, and, only where a mere difference to a small extent in the same character of organs exists in what are considered different species, can any representation of the parties to the union be obtained; and where this difference in the construction of the same organs in the two different orders of work, that are nearly the same, is as great as it is in the case of the ass and the horse, the product of their union is deprived of the means to perpetrate such an outrage on the plan of the Almighty to cover the earth with what its condition and its whole creations required. The only thing that prevents the ugly and unwelcome cross of the ass and horse propagating their un-

sightly forms, is the want of that harmonious relation with the Creator that all creatures are compelled to possess that can perpetuate their species. It is merely an insufficient amount of generating batteries, (by batteries we mean the veritable constructions for generating electricity in the body, and which influence is the only thing that connects us with the Creator,) in their bodies to do the work of inaugurating life.

The scientific world ought to be able to discover that the product of a union of such a character as one between the ass and the horse, is capable of disclosing what constitutes the commencement of life, and what it is that allows the product of the cohabitation of all species, a chance to acquire what will give them offspring as well. In this outrageous interference with the divine calculations in respect to the existence of the animal world, the very truth of which we are proposing as a theory can be seen. The sexual organs are the latest developments in an embryonic unfoldment, and when an imperfect sexual connection of different species has taken place, these organs will never unfold to any extent. What a comment on the foresight of Him, whose palm is on the smallest creation, and whose presence is as certain as the object He effects. In this law that prevents a development of the sexual organs as rapid as the development of the other parts of the system, there is also seen another exhibition of design, for it prevents at the same time the creation of imperfect beings, and the destruction of what is already created.

Now, when the fact is seen, that the purposes of the Creator in constructing only such species of animals as are suited to the condition of the earth, and capable of affording the means of unfolding what is designed to follow them, are assured or rendered incapable of being defeated by any other affairs than the very means ordained for their suspension, it can be more easily observed that only from the vegetable organizations that have existed are there the creations that can produce a variety of animals as great as is now in existence.

Let this most important truth be carefully considered, and every student who wants to discover what could constitute a source for each of the different orders of animals, can find it in the world of plant creations. It will not be possible to discover that any capricious deviation of growth of any part of an animal can be so cultivated or perpetuated as to defeat the law we have pointed out, or give the earth a different species of animals.

This is the reason why, at this point, we are pointing to the fact that there is no source from which such a vast number of animal species could be obtained, before explaining any further correspondence of animals to plants.

Now we will look at this character of evidence, and continue the comparison.

The small creations shall first receive our attention. The insect life around us is everywhere exhibiting its origin, and the resemblance of the different orders of insects to their origin. The little creature that chirps in the cracks of the chimney is calling for a recognition of its advancement from a plant that could only wave its small top in the garden. The crawling worm that repeats the habit of the spear of grass, in opening an escape for the world's great current of electricity, by coming up out of the ground after the ground is deluged by a sheet of water, is operating only a more extensive office in creation than could be operated by what afforded it being. The snake, as it crawls through the bushes and into the heap of rubbish, from which its prototype was able to grow, is exhibiting only an animated briar, with a sufficient organization and intelligence to enable it to perpetuate its existence. The caterpillar, as it creeps along the earth and ascends the stock, and follows along the branches of a tree, is but a better construction of a joint of a cucumber vine, with as many cumbersome branches of the character of hair, and it finds its food in the same substance that attracted the vine of such a plant as the cucumber, and gave it a magnetic current that assisted it in its development.

The great beetle, which comes around us in the evening, and whirls in its flight as quickly as a girl in the dance, is giving us a call to show what can result from a plant of a similar shape, and its long protrusions from its head are very good caricatures of the leaves of a turnip. The small and disgusting bug, whose back is striped and its head turned downward, and which is gnawing on the vines of potatoes, is showing us what a cucumber blossom will produce if separated from the vine that is so fond of absorbing the influence of a potatoe top.

This disgusting bug is so much the shape, and possesses as much of the stripes of a maturing cucumber as it can, and possess its means of getting a living. The sly and cunning spider that is capable of teaching a warrior how to surprise and overcome an enemy, is giving us, not only a better development of a dandelion, but a caricaturing of all the peculiarities of this plant. It will be all seen when the description of its construction and habits are given.

The beautiful butterfly which affords us a picture of a blossom on legs, is but extending the blossom's movement in the air, and its ability to cling to the object that allows it a rest above the creeping destroyers of the ground.

The greater butterfly, which speeds as a bullet, from blossom to blossom, and sips a mouthful of the sweet that gave its prototype a mouthful of the same delicacy, is only a different style of result from a fallen blossom. This partly constructed bird, and which only wants a more extensive covering of feathers to give it a birdlike character, is what can be seen any season, after the blossoms of plants are capable of furnishing it the wherewithal to live. In its existence, and it is usually called a devil's darning needle, there is found the very key that unlocks the mystery of the origin of birds. It is all covered with what only needs a greater development to render it a bird; and the tail is only an undeveloped construction which would, if further developed, become as gaudy and astonishing as the caudal appendage of the peacock.

The small and pretty fly which is so constantly attending our meals, and insists on obtaining the first taste of the delicacies, is only a creation from one of the many blossoms of the field, and it is never seen where there are no blossoms of a small construction.

The usual accompaniment of flowers that the ladies of a family are sure to cultivate in the garden, or on the windowsills, are sure to come into the chambers of such cultivators in the form of flies, or butterflies, or millers, and the destruction of clothes by such of these creatures as can deposit their eggs in a warp of woolen, is only a continuation of the devouring of the warm influences of a warm room.

The most injurious and despicable of all bugs, the one that prowls about the sleeping person in the silent watches of the night, and smells like the dirty scalp of the human being, is giving the careless housekeeper a chance to discover what can result from the scab of a person's head that is unwashed for months. It looks, when in a condition of starvation, as much like such a scab as it does like itself; and when it is full of the spoils of a crusade upon a sleeper, it is only causing its body to exhibit what created the scab. Its haunts are always at the head of the bed, until the number is so great that an emigration to the foot becomes a necessity.

Now we will continue this, pointing to the source of the existence of the different species of insects, and give the reader a chance to look for himself and decide what truth there is in a theory, that from one or a few original insect creations, all the varieties of insects were produced, and which does not undertake to disclose the origin of the original creations. We desire, before pointing to more of the sources of insect creations, to examine the resemblances of the operations of the insect to those of the plant, from which it was evolved, and the peculiarities of the conduct of the insect with what should be considered the conduct of such plant.

Let us take, for instance, the spider; what a stomach it possesses! and what a resemblance it has in shape to the roots of the dandelion, when the roots are turned down to a point below the leaves. In this plant a great greed for water is seen, and it consumes more than any other plant of its size, for it developes rapidly and continues to push a long pistil into the air. So is the spider as greedy for its source of growth. It will consume as much as its own bulk, and sometimes more. It pushes its pistil into the air too, and on its tip the seeds of its young are created, and allowed to construct other spiders. Its pistil is carried on the end of its great stomach, and is constructed of a web as near like the web on the end of the pistil of the dandelion as one object can be like another when produced by growth.

The web of the dandelion encloses its seeds also, and when they are in a condition to be capable of generating other plants, the web is broken by their weight, and the seeds fall to the earth. So do the spiders in the web which surrounds them, when of sufficient weight, break the web at its moorings, and then smash it all to pieces and leave it to decay.

When a spider is angry it will continue to give battle to the object that annoys it, and in this contest there is seen a stubborn character, as well as in the plant. In the spread of its legs only a repetition of the spread of the leaves of the dandelion is seen; and the hairs on the legs of the spider are of the same shape as the branches of the dandelion leaves. Its claws only copy the points of such a leaf. Its eyes and feeders are only a more useful number of pistils than are employed to make up the yellow blossoms of the plant, and are nearly of the same shape.

The body of this insect is but a consolidation of the gases of a decomposing dandelion, and in this consolidation of such emanations of a plant can be discerned the cause of the differences in the size of all objects of life and the plants from which they derived existence. Let the reader observe this cause of such differences, and in the further course of this work, a most astonishing truth will be explained by the fact it embodies. When this fact is observed in the creation of a living organization in a womb of a human or animal female, the old doctor of the older profession of medicine can begin to discover why a child of the human family is obliged, in its embryonic unfoldment, to appear as a dog or a brute of some other character, before the human organization is able to become established.

We shall hereafter thoroughly discuss all the philosophy of generation of life in the egg and womb of the different orders of animals and of the human mothers.

Now what can give us a certain indication that the worm, which is used by the fisherman to bait his hook, is a better development of the spear of grass that is sure to follow the growth of clover? When we examine a spear of this kind of grass, commonly called herds grass, we find it is constructed in joints, and of considerable ingenuity. It is a production very much like a corn stalk, and one joint is developed at a time, and a joint is not possible until the preceding joint is developed. When a joint is developed, another one is crowded out in the center of the preceding one, and it is only a heap of protoplasm filling the channel of circulation, of what is already constructed. It acquires a channel of circulation, only by the current of the earth's electricty creating a clearing for its discharge. The channel will diminish in size, just in proportion to the escape of this influence through the sides of the joint, and this escape through the sides, is the philosophy of the growth of the sides of the stalk, for every puff of this influence at the surface of every stalk, or branch, or leaf, is a creation of a cell of a plant. The influence is as sure to condense at the surface of the plant and create a cell or tissue, as a puff of steam is to condense at the nose of a tea-kettle.

In this development of this species of grass, and the philosophy is nearly the same in every other species, we can discover exactly the same process that takes place in the development of this worm; and in the absence of a current of this influence in the interior of the worm, as produced in the plant from the earth, there is a little world of substance as much like the earth, as one part of a thing can be like another, in the stomach of this worm, and it is easily seen when the worm is destroyed, for it is always full of earth and only earth. Now, this decomposing earth in the stomach of this creature generates exactly the same kind of influence that pushes up the joint of the plant, or the old pine tree on the plain.

The original joint of this worm is simply the converted joint of a decomposed spear of grass, and the great hole in the joint allows a filling (dressing) of a part of the earth, and it gets into it simply by the action of the water that is running through it. When it is in the converted joint, a veritable battery for the creation of a force to push out other joints is constructed. Let a glass tube be filled with earth and kept in a moist atmosphere, and a growth of different kinds of weeds will be observed at one end of this instrument. The north pole of the tube will secure the adornments, and this simple exhibition of the power of electricity to generate plants should be sufficient to convince the whole scientific world that only electricity is wanted in this operation of nature.

Now, the amount of earth in the joint of a worm, will not permit a great degree of growth, and it is not seen in this worm, but we can see a process of growth identically like the growth of a spear of this kind of grass, and in this growth of the worm there is a creation of the same kind of joints. Look at a worm of this character and see if this statement is not correct. In what is now

described concerning the development of the simplest kind of worm that exists, can be discovered all that can ever be known, and all that must be known to explain the character of growth which has received the pedantic appellation of gemmation. This style of growth is observed in all crawling creatures that have no means of propagating their order by what may be called reproduction. In some of these creatures a joint is actually separated from the previous one, and the operation continued in the one thus detached, but it is not the faculty of reproduction as understood by the common employment of that term.

Nowhere in the entire catalogue of scientific books can a work of this character of explanation of gemmation be found, and it is as puzzling a problem to the teachers of science as one that involves an understand ing of Deity.

In each organization of the earth commonly considered plants, there is only a beginning of what is considered the animal kingdom, and there is actually no point in the whole line of both kingdoms of creation where one actually ends and the other commences.

In the insect and worm creations there is always a blending of what is termed plants and animals. In these more simple organizations the character and manner of unfolding of plants is more extensively employed, and the difference in plant and animal development increases as the size of the animal organizations increase. In what can be observed in the development of a worm just delineated, there is perhaps as little departure from the way its origin was developed as can be seen in the development of any animal organization.

In this disclosure of a reproduction of plants in a higher degree of development there is all the evidence a scientific mind can want of the most important fact, that a world of plants was ordained to become a world of animals.

If one instance of an unfoldment of a plant into an animal is established, as a fact, the fact is also established that every animal of the earth, except the whale and elephant, who required both plant and animal substance for their origin, was originally produced in the conversion of what a plant evolves into an animal of such a form.

Nowhere in creation is it discovered that more than one method is employed to accomplish the same purpose, and it cannot be discovered that any change in such a method is ever made, except to the extent of giving a greater development of what is produced by such a method.

Such a change is never the adoption of any entirely new device, where the object to be accomplished is but a further unfoldment of the creation.

Now, when this statement is read, will the reader inquire of the supposed savant of science if there is a variety of operations of nature to produce a common or single purpose?

In each of our bodies, which are the most complicated constructions of the whole universe, there is still the employment of what creates a joint in an "angling" worm, and all the other methods for unfolding our systems are but additional contrivances for such a purpose.

The very operation that is performed in the stomach of a worm that produces its additional joint, and crowds the partly decomposed earth through its body and out of it, and gives the worm a source of life and power of motion, is in our stomachs also performing a similar work, and if the human system was only a continuation of joints, this operation would be all that would be necessary for our development. In all the animal orders only a philosophy as simple as is seen in the worm is operating to cause their growth is observed, with no other changes than are necessary to construct what additional organs the animal possesses.

Now, when the observer of a worm of the character described is through with his investigation, will he be kind enough to look at what we call the foibles of physiologists concerning the reproduction of this class of creations, and ask himself if there is any such thing in this worm as sexual organs, or sexual congress; and where can the office of sexual congress be performed in the earth, that only allows a separation of the part within and without the body of this worm, by a mere crust of partly consolidated protoplasm?

Let us now examine a common beetle, and see whether a turnip is not pretty well represented in this voracious order of bugs. In this animal's body there is simply a turnip with life and qualifications for motion.

The anthers of this bug are only so many converted leaves of this plant, and they point

in the same direction from the bug's head. In its eyes only an anther is stopped in growth, and in its feeders there are only partly developed anthers.

Its body is of the same shape as the turnip, and its stomach is tipped by a converted root, that was on the bottom of the turnip. Its body is only the accumulation of the base of the turnip's leaves, and its head is but a part of the body.

In nearly all insects this is the case, and for the reason that only the union of the base of the blossom's leaves is capable of being converted into the head and body also of the insect. The other parts of the insect's form, except its legs and wings, are but a stomach.

Now, in the legs, wings and the projections from this insect's head, there is all that could well be constructed from the leaves of a turnip. What a great example of wisdom is exhibited in this conversion of a turnip into a bug! Let everyone who thinks that this proposition of the transformation of a turnip into a bug, is a mere fancy of the writer, commence with this species of bug and continue to examine all familiar species of these creations, and discover, if he can, a single creature of this form that cannot be found to be as good a representative of some plant around the premises where the bug exists. See if one does not represent a carrot in its longer horns and feeders for its size, and one that will correspond with the smaller species or turnip, and see if the cricket is not as good a representative of the beet and indebted to the beet for its darker aspect, and darker habits of getting a living.

This little creature is capable of singing so loud that it will call a person all over the house without disclosing its hiding place, and it will come out of its closet only in the night, or when there is no disturbance in view.

The beet wants a quiet and shady place to develop in a more perfect way, and it is unable to grow very large in a sunny and dry atmosphere.

Now we will look at a devil's darning needle (Brachelytrous beetle), and see, if possible, what plant it can represent, and what its resemblance to the plant is. In the common thistle (cirsium lance eolatum), which is generally distributed around the world, we can find a good commencement of the creation of this insect, which spreads its wings in the same way, and carries a stock below its wings as well as this plant. Its head is as well provided with a point as this plant is with a point for its root, and it is as well provided with the construction of pricks around the body.

When it is speeding through the air a whole army of flies is scattered by its gyrations, as well as the plant can scatter its flies that encumber its top, when it gyrates in the wind. Of course other plants and insects can create a commotion in the insect life around them, but this ugly and contrary creation is capable of driving all the insect world if not deterred by the web of a spider, or a blow from a weapon in the hands of a person.

Now, in this insect's arms or legs there is a chance to discover with certainty what produced it, for in the limbs of the animal a copy of the leaves of this plant can be seen. It is sure to be observed, if the limbs are examined by a good magnifying glass.

When we are annoyed by the furious approach of this creature, it will be a good chance to deprive it of the means of creating further consternation, and thus the legs can be examined, and its other parts also.

In each part of the insect a correspondence of some degree of accuracy will be always found. Its whole contour is like that of this plant.

Let us for a moment examine a grasshopper, and if possible discover why these jumping insects can appear so much like a bird, and chirp like them, too, and why they are compelled to assist their wings by a lift from their legs in their flight. They are only a developed carrot, and their bodies are of the same shape, and nearly the same color. If they had only their long stomach and head, with the feeders pointing forward, their appearance would almost suggest their origin. In these creations, as in all insects, a use is made of the leaves of the plant to construct the legs, wings and projections from the head, and the union or base of the leaves, or, if it is a plant with a single stalk, the roots are in every case the means of construction of the head.

Let us here state that every animal that has now, or that ever had an existence on the earth, found the origin of its jaws in the roots of a plant of greater or lesser size. And every bird and every insect that now exists, or that has existed at any period of the earth's existence, obtained the means of feeding itself

by a pair of pincers, as is seen on the heads of each of these creatures, from the pistils of a blossom of some character.

And let us also assert in this connection, that the horns of each of the animal species that possess them on their heads, were originally derived from the branching roots of a plant, and every horn on the heads of the brute creation is a good example of the truth of the statement, that no animal with horns could have attained such adornments or means of defence from any source except what is here disclosed.

In this connection also, let us further state that the fish of any water, are as entitled to these pointed evidences of the origin of species as the land animals, and they possess them only in proportion to the number of marine and other plants that gave up their souls in the water. The very fact that the plants that develop at the bottom of an ocean or smaller body of water, do not possess great roots, and the further fact that the greater plants of the land, when washed into the ocean, are deprived of their roots, and what trees fall into the water are only allowed a ducking of their tops, are all the facts that need be pointed to to satisfy the inquirer that the fish of the seas, or fresh water, are as well provided with horns as they can be under such a deprivation of the roots of the plant creations.

When this surprising fact is considered, let the observer construct a theory of development that will give a reindeer a pair of antlers that will be as much the copy of the roots of a pine tree, as such antlers are, and which will also produce on the buffalo a pair of horns, that will descend in front of the animal's head and rise again, as the roots of the oak and maple will.

When the student of nature is able to compare the work of creation, one order with another, without being canvassed by a whole library of errors, and without being afraid that an innovation will be made upon the popular idea of a great object of admiration, there will be a great opportunity to discover that all animals are, after all, but plants a little more developed, and that man is an animal, only a little more developed than the source of his existence.

It shall be given the world for the first time, in a way to disclose what can be observed of this truth, in this paper, and the whole scientific profession are invited to assail it.

Let each reader of our paper ask his teacher of science to deny what is in this chapter.

Let them overhear our challenge and await their reply.

Now, in our next number, a little further explanation of insect origin will be given, and then a chance will be afforded the world of thinkers, to see what the origin was of the multitudes of songsters, whose throats are stretched in the spring and summer to call us to observe an unfoldment of what was once upon the same branches, in a glory that surpassed the glory of Solomon's robes, and only a little less beautiful than these chanters of their requiems.

Chapter IV.

In closing the previous chapter it was stated that a further examination of the insect creations would be made, and that after that an examination of the origin of birds would be undertaken.

We will, therefore, call the attention of the reader to what is generally called a potatoe bug, and which was mentioned in the last chapter. The shape and stripes and characteristics of this bug are in many respects like the shape and stripes and nature of the fruit of the plant. Every one of these bugs is given a head that is turned down as the point of the cucumber usually is, and in at least one-half of the products of the plant an exact resemblance to this bug is seen in their form and stripes and in the color of their stripes.

The bug is possessed of as great a stomach as this vegetable is of what can be considered a stomach, and it is as avaricious for the substance on which it exists. It will follow the same vines that a cucumber will wind around, and select in a garden the same plant to consume that a cucumber vine will select. When a reader of this chapter is passing a store where such vegetables are for sale, let the comparison of this bug with one of these vegetables be made, and don't forget to observe the head and neck of the bug in connection with the neck and commencement of this species of melons.

Now, what can be discovered of the origin of the work of creation that is incumbering every kitchen and dining-room in the country where the frost is not capable of giving

a bread crumb a better occupation than a manufacture of roaches. These stupid and dissolvable creatures are produced in a warm kitchen, where a whole floor is well supplied with cracks, and which can mould bread crumbs into bugs as oblong as the roaches are; and the cracks in an old sink, or in the casing back of one, will be as good constructions for allowing bread crumbs to commence walking around the house. Let a bug of this character be given a dose of acid and a fermentation of the wheat in its body will be sure to take place. The best means of ridding a house of these filthy creatures is to cause them to move through some kind of acid or an alkali. When a chance is obtained for examining one of these bugs, there is a first-class opportunity for discerning a wheat bur or blossom on the end of these bugs' legs and which serve them for feet. They are so clumsy that the bug cannot climb anything except what will allow a whole foot to be placed into one of its crevices or excavations.

Let us ask the housekeeper who is annoyed by an army of these dirty insects, to say whether the feet of this insect are not clumsy mop-like contrivances? When the reply is given will they not connect the existence of this bug with the crumbs of bread that are swept into the cracks of the sink and kitchen floor.

We will now undertake a disclosure of the origin of what is the most active and the most greedy of any insect of its size, and which is so small it is eaten in mouthfulls by every person who eats cheese. When it is in the stomach it continues to tear around, and it will tear off every cell in the coating of the stomach if allowed to remain there long. Now every creature of this character, and we mean the bug that is generated in decomposing cheese, is as much like a hog as a thing so small can be, and it is actually generated in all respects as the hog was generated.

It is but a mere accumulation of the cells of the fibrine in the cheese, and such cells as are given an existence when the coarser part of them is decomposed. In such a creation of course the production is one from an animal tissue or cells of such a tissue, and there is no difference between such cells and plant cells except in the consolidation of their substances.

These animals are afforded all their organization by the mere magnetic current that is coursing through them, and in their arms and legs this is seen, and in their constructions for acquiring what is giving them growth only a pair of forceps is constructed. Some of the constructions on their bodies are useless, and appear as mere horns or hairs, as transparent as the whole body is. Every insect as small as these creatures are is but an animated cell which is covered in part only by a decomposed portion of the cell, and which appears as black and lifeless as charcoal, and it is nearly the same kind of substance.

Now, when this statement is observed, the inquiry will be made what is there in the magnetic current that is giving each of these creatures that is employed to perform the office of life, and why are they caused to employ it? This inquiry, if correctly answered, will disclose all the philosophy of life in a human being, and allow us to understand why we are compelled to employ our limbs for the performance of what will afford us existence.

It is only a construction of what the body is compelled to operate in obtaining what is useful to it, and the work of satisfying a want of the body is all that is ever operated in any living creature. The diversity of the wants of a body of any creature is produced in proportion to the character or unfoldment of the organization, and in every degree of unfoldment there is an increase of the requirements of the organization. Now when it is stated that a Creator is affording the unfoldment by an actual application of the mind of this author of all creations, in an organized life of an animal character, and giving each of such creatures the necessary power for continuing their existence, all is said that ever need be said to explain what allows a magnetic current to perform all the operations of an insect or of any living creature.

In every animal there is this simple force, and the substance on which it is operating, and the force is only performing a work of divine calculation. Whenever it is constructing or moving an organization of the animal kingdom, it is actually supported by this Author of the universe, as it is controlled by the will of any animal or person in the limited scope of the beings' ability to operate it.

Who this wise and all competent Author is is an inquiry that we are unable to discuss, and it never will be discussed with profit until mankind has discovered what the works of creation are, and what they are all established for. When we have learned what this Author of all the affairs of the universe has actually done, and what it is all done for, we shall be sure to commence an investigation of the origin and character of the Creator. Let us in this connection state that in the construction of what is capable of being discerned or examined by the human faculties there is only an employment of exactly the same force or influence that is employed by every animal or human being in performing what is done by the operation of the will, and the only difference in the attributes of the Divine will and the will of the brute, or of a human being, so far as the power of controlling substance is concerned, is in degree.

Every person who can influence another person by the operation of the will, or cause a single organ of the body to move, is making exactly the same kind of use of what is termed electricity as is being made by the Creator.

No other explanation is necessary of the very means employed by the Almighty to whirl a solar system, or whirl the waters of our oceans, or whirl the old foibles of the scientific world out of the heads of the people who accept them.

Let us now commence the examination of a kingdom of most interesting construction, called birds.

These creatures are found in the same places that their origin is found in, and they are not found anywhere else. They are pursuing the same character of work, and something more.

In each member of the species of the smaller birds there is a copy of a blossom of one species of plants, and in the greater kinds of birds there is an outgrowth of a whole bush of blossoms. For the purposes of comparing one of these creations with the other, it is our duty to confine the comparisons to such orders of birds and flowers as are familiar to all the readers of this work. Let us take, in the first place, a common sparrow, or what is better known as a swallow.

It can display a great deal of its origin in its appearance, and if a blossom of the hollyhock plant was bereft of a part of its leaves, and was allowed to whirl in the air as the swallow does, it would be supposed that it was a swallow.

This bird is only a converted blossom of this plant, and it is allowed to become greater than the blossom only because it is given the character of digestion that increases its organization. Every animal that can digest food as well as a bird can become greater than its origin, and it will become as much greater as the place of its reproduction will permit. This will be more fully explained as we proceed in the work of unfolding the origin of organizations. In the reptile species the ability to develop a creature greater than its origin is not seen, and their means of converting food into substance of growth is less than those in the bird creations. This fact is well known to physiologists.

Now, when the fact is seen that a whole world of animals is only a further unfoldment of plants, we shall also see that what is considered the greater unfoldment of plants is utilized or made use of in the unfoldment of the animal kingdom.

The digestive organs are more developed in the bird than in a common snake or other reptile, only because a greater development of a plant was possible from its blossoms. So, also, in respect to the circulation; it corresponds in development and extent to the plant organizations that afforded the animal origin. Let this fact be borne in mind and a glance at the creatures of the earth that are considered the most developed, such as our domestic animals, or the kinds whose creation we are discussing, and also at the earlier creatures of the earth, and we cannot fail to discover that any of such species of animals correspond or did correspond, in respect to development, to the development of the plants at the period of the creation of such species.

What a comment on the theory of abortive growth, or misdirection of growth as a cause of a world of different animal species, if this statement is true! Let an examination of the character of plants and animals be made, and with the purpose of discovering whether a plant was capable of becoming anything more than a fish if its organization was that of a fern, and if a bush of beautiful flowers could be converted into anything less beautiful than a peacock, or whether a plant as

much developed as a willow of our fields could be organized again in any other character than a cow or what could begin a whole family of cows?

In all these plants a commencement of the organization of what followed them was made, and the product was the only one that could be given these creations.

When we are describing a construction of a fœtus in a womb, a further understanding of this formation the most advanced organization possible from the emanation of an organization of a lower order will be obtained.

Now, every bird of any land is but a product of the blossoms of such a country, and the plumage and character of the birds of a country will correspond to the flowers of that country.

In each bird a good opportunity is given us to learn that it was created from a blossom, for on its beak there is but a construction from the pistils or anthers of a blossom, and in its eyes as in insects there is another employment of those openings to the interior of a plant.

In their wings and legs, as well as in the wings and legs of the insect, there is an employment of the leaves of a blossom, and in its tail a still better unfoldment of what is considered the calyx of this unfoldment of plants.

Its feathers are only such corolla as are constructed by a growth that is much more extended than the growth of a flower.

In all these constructions from a blossom the same use is made of the different parts of the blossom. Now what can be said more to satisfy the reader that a bird is not a fish or reptile developed by a divertion of growth, and what is necessary to be stated farther to establish the fact that all the creations of the animal kingdom occupy the spheres of existence that their prototypes of the vegetable kingdom occupied. If it is necessary to point to further evidence of this fact it is accomplished by the statement that every bird that dwells on the ground is a result of a transformation of a whole bush of flowers that were also on the ground, and the further statement that no bird does dwell on the ground that had its origin in the branch of a bush or tree. It will not be claimed that fish or any of the reptiles of the character from which the evolutionists claim birds were derived, ever lived in trees, or that a development by what is termed evolution would create a disposition in the developing creature to exist in the air or on branches of plants. Let this suggestion be contemplated, and let Mr. Huxley inform the world why reptiles got into the habit of soaring in the sky, and lighting on the bows of the great plants.

What a wonderful amount of evidence, that our hypothesis is a correct proposition, is seen in the fact that all orders of animals are only able to exist on the same plane of creation or in the same elements of the earth's conditions as the origin of each existed in!

And what a glorious order of construction, that allows every part of the earth's accompaniments of the character of water and air, and soil to be permanently occupied by what will tend to clear these substances of all their impurities, and still further advance our world, in a way to afford the human family a dwelling place of comfort and safety. Even the animal kingdom furnished man companions and protectors, and in the earliest periods of the existence of the human creations, such protectors were absolutely necessary in order to prevent the ferocious animals destroying the human race. The dog was the protector against ferocious beasts, and the cat was the guardian of sleeping man when the air was full of bats and other blood-sucking creatures. In the cavern where only a cat or dog could accompany a human family, these faithful followers of different species of beings were able to give protection to the inmates of the cavern, and if unable to cope with an invader their cries would call their companions in human form to their assistance.

Both the cat and dog are performing similar offices for man to-day, and when we contemplate what these mere brutes are able to do for us and what their species have done in past periods of the earth, we are obliged to acknowledge these favors and ask ourselves if there was not some calculation or purpose of the character we are describing, that was fulfilled in their existence, and if the Creator was not such calculator or designer.

What capricious growth of any animal, or what transmitted change of form gave the dog its affection for man, and what gave the cat a companion of the same character, and what gave the cat and dog an inclination to

dwell with man, if these animals were but mere accidental offsprings of accidental environments?

No wonder could be greater, and no caprice more astonishing than the creation of a faculty of character or mind by a chance misdirection of growth, and the wonder would only be the product of a proposition that is absurd and of no foundation.

Now let us look at the birds again and see if there is not still further evidence of the fact that they are only blossoms given life and power of acquiring a living.

Their plumage is a gaudy dress of use as well as of beauty.

The only use of a flower so far as its separate existence is concerned is to please the eyes of man and of some animals.

Every bird has a plumage of the same colors as the blossom from which it obtained its existence, and on the backs and other parts of the birds are all the colors that can be found in blossoms. The old rooster as it struts about the yard and calls for the hens to come and share its meals is so proud of its plumage that it will flutter its wings as a girl wraps a shawl of bright colors when spectators are in her presence, and when this bird is giving us a call from the top of a fence, it is only an outburst of pride at the glory of its construction.

This very performance is only what is seen in a human being when the throat is stretched to utter the notes of an exalted soul. The character of this noise is only more agreeable than that of the performance of the rooster, and all the notes of the bird creations are sweet and musical according to the character of their development.

When a crow caws at a traveler only a growl at intrusion is heard, and when the peacock gives its infernal scream a mere anger at what is annoying it is heard. He calls for other peacocks to come and sit or walk where he can be admired.

Now in this bird's tail only a number of long feathers are constructed in order to display a branch of a bush that possessed a blossom, and in these wonderful conversions from such a branch a copy of the flower of the branch is actually portrayed. In every feather of this character a blossom's leaves are seen and in the same shape as when on the plant.

What a startling disclosure it is, is it not to find a blossom's leaves actually stamped on each feather of this bird's caudal appendage? Let the reader observe them and give us an answer.

No greater evidence of the relation of a bird kingdom to a kingdom of flowers can be wanted than can be found in all such caricatures of blossoms on the bodies of birds.

Let us look at a more common kind of bird, the smaller bird that exists only along the banks of streams, and finds its food in the fish it is capable of catching. It is usually called a king-fisher. It is as much like the gaudy lily that is waving in the meadows along the same stream as a conversion of a lily into a bird will permit, and its blue and white adornments are in keeping with the blue and white of such lilies as are fond of a wet soil. In its delight to swing upon a branch over a stream of water there is a repetition of the habit of the lily to swing on its stock on the bank of the same stream.

In the golden pheasant a mere attempt to work out a better unfoldment of a blossom of the same field is seen, and it is only occupying the same plain of existence.

The woeful owl, as it continues its sly and cautious habits of getting a living, and plunges from a great elevation into a swamp of grass and bog to catch a mouse it observes in the dark, is only continuing the characteristics of a blossom that develops on a high branch and plunges to the earth when it is unable to get a sufficient support on a tree.

The mocking bird, as it cries for an associate and tries to converse with mortals, if it has no companions, is only another species of blossom given animation and intelligence, and in fact ever feathered creature is but a greater development of a blossom, or a bunch of blossoms.

Where are we to discover their origin if it is not what we are claiming? And what system of evolution could create so great a variety of these creatures from the reptiles of past ages? What would have created a greater variety of birds than there was of such reptiles? And if it is supposed the great variety of birds was possible by an evolution of their species. where is the evidence of any transformation of one species to another? What is the fossil that discloses such an incomplete development of one species as to afford us any grounds for such a theory? It is nowhere to be found, and it will never be obtained.

What a comment on a theory that a whole world of scientists is declaring it a revelation of the commencement of the orders of he animal species. Now, we can dismiss this class of creations for the present and examine a different class; the one that is claimed to be the order from which birds were evolved.

A snake only wants pricks on its body, as some of them have, and their jaws wide open, to appear in all respects like the briar bush that afforded them a beginning of existence. In some countries the briars of the bush they are copying are actually grown on the snake, and if the creature could crawl as well with these sharp points as it can with them in the form of scales, it would possess only the pricks of a bush. In any museum of these creatures, one or more of the species that are allowed the points of the briar can be found, and in their existence a whole volume of the evidence of the fact that every animal owes its existence to the vegetable kingdom can be studied. The shape of every snake is the same as its plant prototype, and the construction of these creatures, in respect to their organs of circulation, and what affords them means of getting a living, is almost identical with that of a briar of the character of a blackberry or raspberry. They suck all their food into their mouths after it is well mashed and watered, and their circulation is little more developed than the circulation of fluids in a briar bush.

The scales are only a different character of construction from the pricks of the briar and afford a more useful employment of them.

Every snake that is crawling on the earth is capable of exhibiting its origin in still other ways, for instance, a rattlesnake still carries a copy of the mulberry berry on its tail, and only the centre bunch of the berries of the plant are given this distinction in the unfoldment of the plant. The spots on the snake are also copying the spots on the bark of the plant, and its wide and scalloped jaws are resemblances of the roots of this shrub. The snake will coil and sleep at the base of the tree, and in the bunch of bushes at such places as it exists in. All plants that are annual in their development of foliage allow their plumage to fall to the earth and their sap to retire to the recesses of the earth on the approach of a cold season. The snake is divested of its skin in a similar manner, and it will also retire to the recesses of the earth for a temperature that will not freeze its substance of circulation.

The snake is made stupid by the cold, and the bodies of such plants are also.

Now when a black snake can be found where there are no blackberry bushes, or a striped or garter snake where there are no briars that look like it when matured, we will reconsider a part of this work and correct any error that is in it. A copperhead is given its color of the ripe and yellow apple, through the apple tree twig that afforded it origin, and its spots and color were obtained from the same source.

The horned snakes are only allowed a little greater unfoldment of the roots of what afford all creatures the jaws and horns they possess, and it is no more strange that a root of a small shrub should be converted into the horn of a snake than that a whole clump of such attachments of a plant should be rendered antlers of a reindeer. All these projections from the head are but so many unfoldments of roots, and are as consistently on the head of a snake as on the head of a deer.

Wherever a root is seen in the condition of a horn a base of a plant is sure to be constructed into what is given a horn, and as sure as the head of an animal has horns some of the roots of a tree are sure to be converted into these constructions.

What a perfect unfoldment of the roots of a plant is seen on the sheep, and what a clumsey construction is seen on a moose.

This creature is so covered with its horns that it can rush through a forest and turn all the branches of the trees away from its sides and back until their recoil is unable to harm the body. The Ibex and the antelope are as well prepared to dash through a forest or bushes without harming themselves with the branches of the trees or bushes.

Now let us find the origin of that most abundant and poisonous reptile of India that is carrying a great piece of foliage in the condition of a goitre on its neck. It is called the *cobra-de-capello*. The naja of Africa is encumbered in the same way, and is calculated to disclose its origin as well.

This cobra is but a plant of old India given the wherewithal to exist and to destroy the existence of the inhabitants of that country. The character of the plant is the same in

form and construction as the lady slipper of our forests on wet and low lands. On this plant is a hood of the same shape as the so-called hood of this reptile, and the head of the plant has the same shape as the head of the snake. A similar plant is sure to be found in India and Africa, and it will be found that on the two plants of this character in these countries, there is a peculiarity of construction and colors and stripes on the leaves that accounts for the difference in the color and stripes of the two orders of snakes.

Every creature of this miserable condition of development is compelled to disclose the peculiarities of the plant it developed from.

The most astonishing exhibition of this truth is perhaps seen in the huge reptiles of the tropics, and which are found in no part of the earth except where equally great objects of the character of vines, twine themselves around the same trees and swing from the same branches.

These twining and swinging reptiles are copying the habits of the vines in all their operations and on their bodies can be seen a perfect copy of the spots on such plants.

In no part of the globe where great vines are not climbing the forest trees and swinging from their branches, can one of these snakes be found, and no one will pretend that it can be. No one will deny that these snakes are shaped and spotted like such vines, nor will it be denied that they wind around a tree in climbing it, or that they follow along the branches and allow their bodies to be suspended from the branches by their tails.

Nor will it be denied that in the operation of catching and holding and winding about a deer or other animal and hugging it to death, and then swallowing it whole, such a snake is only copying the habit of one of these vines of winding about a tree and its branches and swallowing a whole tree by its folds and the absorption of its vitality.

Let our scientific authors who are so well assured that a snake is only a development from some lower order of reptile, ask themselves if this caricaturing of the great tropical vines by great tropical snakes does not require an explanation of its cause if their ideas of evolution are correct?

We can find no apology for an educated and intelligent mind that will observe this evidence of the outgrowth of animal organizations from a vegetable world, and declare that it is not a rational solution of the problem of animal origin.

No other evidence of the truth of our proposition is necessary beyond what is already given, and the hypothesis could safely accomplish a success of acceptance on the evidence already pointed out.

We will assure our readers and all who are interested in this inquiry as to the origin of species, that only a meagre portion of the evidence of the truth of our theory is yet given, and we are confident that before the whole of it is seen, the reader of this paper will conclude that the theory of so-called evolution will not bear investigation.

In the next chapter a glimpse of other species of reptiles shall be given, and a chance offered the reader to see what gave them different forms and characters, and it will, if we are not mistaken, be capable of disclosing their origin, and the degree of unfoldment of each of such orders.

Chapter V.

We closed the previous chapter by a promise that we would examine some of the other species of reptiles, and will now try and fulfil that promise.

The reptiles we shall examine are those most familiar to the reader, since an understanding of our statement can be best obtained when there is a knowledge of the construction of the creatures referred to.

The alligator is entitled to a careful examination of its construction, and in its creation there is a great amount of evidence that its origin was only the soul of a log that decayed in a hot and slimy water.

Its circulation is but little more developed than that of a fish, and the plant that afforded it origin had but little better means of unfolding than the simple fern that constituted the origin of fish.

No more branches appear on the fish than were developed on a fern, and in the alligator only as many as were developed on the pine, and in both cases the branches of the plant are typified in the branches of the animal. This growth of branches on a fish or alligator is only a caricaturing of the limbs of the tree, and the fins and tail of the fish are only a caricaturing of the ferns' branches on its sides. No order of animals exists and none ever has existed where the members bore on

their bodies a fin such as fish possess that did not have their origin in the decayed fern of the shores of the water in which such animals exist.

If any animal possess horns or limbs as well as fins it is because the origin of such creature was constituted in part of the root of the fern and the branches of a plant more developed, and this mingling of the productions of plants was simply on account of their decomposing in the same slimy and warm water.

No other evidence of this truth is necessary than the fact that only after a greater development of plants was obtained than is seen in ferns did any such character of creatures come into existence. The fossils of the earlier fishes will confirm this statement.

Now, let us look at the jaws of an alligator, and see if there is not some evidence that they are only roots of a pine with their branches converted into such jaws and their teeth!

The jaws of this reptile are somewhat crooked, and in such undulation the undulatory construction of pine roots is observed, while in the teeth of the jaw there is only a use made of the branches of the root. Whenever an animal had its origin in the vegetable organizations or substances that were out of the earth, as in the case of birds and insects, we can discover no teeth, and in every instance where the origin embraced the roots and trunk of a plant, we find a set of teeth as well as the other useful accompaniments of the organization. A root was as able to furnish a tooth from its branches as a trunk of a plant was to furnish a limb of the character of legs from its branches, and in no instance will it be found that an animal with limbs as quadrupeds possess, is without the branches of the roots in the form of teeth.

When an animal is possessed of such limbs it will be found that it has teeth, and in every development from the trunk of a plant will there be teeth according to the development of the branches of the roots. Let this be impressed on the mind of the reader, and in the further course of this work its relation to the other analogies of the animal organization to the vegetable will be observed.

Now, in the bark of a pine tree we discover exactly the same work of a circulating fluid that we find in the bark or shell of the alligator. The bark on the pine tree's trunk or branches is only a substance discharged through the pores of the trunk by the circulation of substance of growth in the channels of circulation of the plant.

The entire bark is but the undecomposed atoms that are passing from the earth into the circulation of the plant. In the alligator exactly the same phenomenon is in operation, and the shell of this reptile corresponds to the circulation of the fluids of its body as well as the bark of the pine does to the circulation of fluids of growth in the tree. The circulation of fluids in a plant or animal is the mere following of the currents of electricity that flow through such organization, and the sweep of currents of this influence through those organizations is for the purpose of decomposing the substance of such fluids, and converting a portion of them into this influence. The conversion of the substance of such fluids into this influence is the philosophy of growth, except that the additional amount of the influence thus created is compelled to discharge itself at the surface of the organs and body, and in its discharge it is condensed again at such surfaces into what are denominated cells.

A cell is a condensation of a puff of this influence at the surface of an organ or body, and it is a perfect copy of the condensation of a puff of steam at the nose of the tea-kettle, except that the current is condensed in the form of a semisphere over the orifice of escape, and the cell is the result.

The influence will exude through the cell that is created, and form another cell that caps the one already formed.

Now when there is substance in the channels of circulation of a plant that does not become electricity, or is not decomposed, it is forced out in the condition of undecomposed particles, and these particles constitute the bark of the plant.

When a particle of the undecomposed substance in the circulation of an animal is thrown out on the surface of the body, it is constructing a shell, or what is but a part of a shell, or horn or hair. The difference in the substance of what is not decomposed in the circulation of an animal, is the cause of the difference between the substance of bark on the plant and the shell, or horn, or hair of the animal. The very properties of the sustenance that is consumed by each order of

organizations, are the causes of the difference in the substance of the circulation of each organization.

In an animal the substance is either plant or animal matter, and in plants it is water, atoms of gases, and fine particles of the earth.

No animal is capable of giving itself a covering of shell or hair, that is not constituted in part of the same kind of matter that is produced on a plant in the form of bark, for whether its food is wholly plant or wholly animal it will be composed, in part, of the substance that constitutes the atoms of a plant, which are thrown on to its surface.

Let us ask the reader to observe the resemblance between the covering of an alligator and the covering of a pine tree, and then it can be more easily seen what is intended when we delineate the process of growth of any reptile.

The reptile, no matter what species it may be a member of, will correspond in its philosophy of growth, and in the constructions on its body, with the plant that afforded it an origin. In what we shall state of this fact, can be seen the most complete overthrow of the so-called theory of evolution.

The growth of a plant is produced by a current of electricity discharged from the earth, sweeping through the plant in its channels of circulation. The growth of an animal is produced by a current of electricity obtained through its lungs, or what answers for lungs, from the atmosphere, or water, and sweeping through the channels of circulation of the animal. Now if the channels of circulation were the same in plants and animals, and the substance of their food or nourishment were the same, only a covering of the same character would appear on both.

If a creation of an animal species, or its origin was from a plant evolvement or emanation of the character we have described, each order of animals would possess a development of circulation and organization corresponding to the circulation and development of the plant that afforded its origin, and there would be a constantly ascending order of animal creations, in keeping with the constantly ascending orders of plants.

Now this is precisely what we observe in the chain of animal species, and the observation is also forced upon us, that in all the discovered fossils of the animal kingdom, and in the still existing species, a plant unfoldment was followed by an animal unfoldment; and further, that in every species of an animal, there is but the product of the previous unfoldment of a new order of plants.

Let us ask the Scientist to contradict this statement if it be untrue. We will listen to any such contradiction, and if it is unanswerable, it shall be so admitted.

In every species of plant, the production of anything on its surface in the way of leaves, blossoms or fruit, or in the way of branches or bark, corresponds in character and amount, to the channels of circulation in its organization.

If the channels of circulation are large and extend in one direction only, the plant will have a growth in one direction, except what will barely create a stalk corresponding to the length or height of the plant. If it is possessed of a circulation that permits of a flow of its fluids in the direction of its surface, it will be sure to possess a great stalk and branches and a great deal of bark.

If it is full of channels of circulation, it will have many branches, and if it has but one or a few channels of circulation, the stalk will be only supplied with leaves.

No philosophy of development is operated in any animal or in the human body, except what is operated in the unfoldment of plants.

The difference in the degree of unfoldment of the animal organizations, is produced by only additional constructions of the same character.

Now, we can ascertain, with absolute certainty, what the origin of any animal was, by an examination of their organs of circulation. The alligator of our southern swamps and rivers gives us as good an illustration of our statement as we can point to, and it is to the circulation of the blood of this creature that we call the reader's attention. It is as limited as the circulation of the fluids of the earlier growth of pines, or developed ferns that were decomposed in such swamps or rivers, and it is as little capable of giving this reptile any covering that is much more than a bark of the same method of construction, as is seen on any pine or hemlock tree. The amount of circulation of the blood of this reptile is the means of creating on its body, what is denominated shell. The shell is only a continuous amount of the substance discharged from the blood, upon the surface of the body and limbs of the reptile.

It is that portion of the substance of the blood that is not completely decomposed in the channels of circulation.

The want of a greater amount of decomposition of the substance of the blood, is the cause of so much substance being forced out on the surface of the animal.

Now, when the circulation is as extensive as it is in mammals the substance of the blood undergoes a greater change and the influence that sweeps through the blood in pulsating currents will in a more extensive circulation decompose the atoms of blood more, and at the same time furnish the channels of circulation with a greater amount of the influence that is escaping to the surface. When it is as great as in the case of mammals it is capable of converting the undecomposed substance into hair. If the animal is in a very warm country the formation of hair is prevented in some cases by the heat of the atmosphere operating with the heat of the body to convert such discharged matter into a rind.

This is seen on some of the animals of the tropics, and it is only a work of the heat that causes the substance to run into a sheet or united coating of the animal. In this effect of the warm atmosphere of the tropics we see a provision of nature for covering the larger animals of the tropics with what will protect them from an army of insects and at the same time afford them a protection from the heat.

The heat of a tropical country is not allowed to penetrate the rind of a rhinoceros or hippopotamus. The rhinoceros will disclose the operation of this accummulation of substance in the form of a rind, not only by the existence of the rind, but by a great thickness of the rind at the base of the greater slopes of the body. It is plainly seen in the amount of this rind on the surface of the animal's body whenever there is a slope of the body capable of giving the mass an avalanche.

The base of the slope will be found to possess a construction of this substance that is thicker and harder than on the part of the animal above it. The same character of work is seen in a measure on the hippopotamus and elephant.

The common pear of our gardens will furnish another example of the sagging of substance in a condition of fluid. The base of a pear will always decay faster and before the upper portion on account of the rupture of its cells at the base by the avalanche of fluids from the top.

The base of the shell of the rhinoceros is rendered harder by a greater consolidation of the substance that creates it.

In its greater consolidation the character of the substance is disclosed, for it is made to appear like the substance of the shell or horn of the animal that possesses these organs.

The mastodon of all cold countries possessed hair, which was necessary in order to prevent the animal freezing, and the only thing that afforded this monster hair in the place of a rind, was the difference in the temperature of the atmosphere in which it was grown. The absence of heat permitted the substance that its circulation discharged on its surface to be constructed into tubes, each one of which would allow a current of electricity to pass through it. The escape of this influence from the animal's circulation into the atmosphere was the provision for keeping the animal warm in winter. This is also the case with every animal whose body is covered with hair, and it is the cause of the capacity of our own heads to prevent our scalps from freezing when we sleep, and are obliged to cover all the body but the top of the head.

The current of electricity that escapes from a hair on the body will create a vibrating motion of the atmosphere around the orifice of escape, and this motion will increase what is called the temperature of the atmosphere. It operates like a jet of water striking a stiller body of water and creating a commotion in it. What a glorious provision for providing heat around us! What a curious generation of electricity. Such animals as are covered with a rind are kept cool by the inability of the electricity they discharge to increase the temperature of the atmosphere around their bodies. The influence of their bodies that is not required to throw out undecomposed substance from their blood is discharged at their eyes, horns and teeth, and in their excretions. Look at the eyes, horns and teeth of the rhinoceros, and the trunks of the elephant, and behold what a corner of marrow can do when assisted by a current of electricity from the blood.

It is worth the while for all who observe the work that is now pointed out to consider

the inquiry whether there is not some actual contriver of what is so grandly and perfectly adapting every organization of the earth to the conditions of its existence. It is but a mere glimpse of the wisdom of creation that one can obtain at present, but quite enough to surprise us with the disclosures of the methods of creation. Let us always be willing to admit that a Creator is in existence, and capable of performing what is performed, at least until that point is reached where we recognize only the work or effects of chance.

Now let us return to the alligator which so fairly represents the reptile creation in respect to its organization and methods of unfoldment. If this creature had as active a circulation as the rhinoceros it would be covered with a rind of the same character, for the substance as it is discharged from its circulation would run together into a rind in the same way, since alligators exist only in warm or hot latitudes. The degree of development of their circulation is exhibited in the character of their shell. It is always a mass of crust around their body and limbs if the circulation is very limited, and if it is more developed it is broken into scales or horns. The only thing that creates a scale or horn is the greater amount of force that is generated in the blood or marrow beneath the scale or horn. The additional force generated in such parts of the body is capable of constructing a scale or horn simply by a greater discharge of the undecomposed substance of the blood. In this exhibition of the effects of the increase of circulation in all animals there is a complete destruction of the idea that the environments of an animal are capable of changing their form and character, for in the possession of a generating source of the force that produces growth there is all the cause or means of the unfoldment of an animal.

No animal is developed by any force or influence that is not generated within its organization. And in this method of unfolding what is given it in the way of its origin, there is all the means of increasing that origin, and all the means of acquiring a construction of a body. The only influence that can disturb the character or appearance of what this method of unfoldment will produce, is that which is capable of forming a vegetable species, or causing its germ or the germ of its seed to develope a form of the same character as itself. The parent of the animal or human embryo is capable of converting a different character of creation in its womb into a being like itself, and this manner of transformation of an object into one of a different form is the work of the magnetic influence of the parent. We shall describe that operation when we reach that part of our discussion.

In no other way is an animal allowed to change the features of one of its species, and in the case of the other species it cannot change them at all. There is a power of either the human or animal organization to modify the features of their species when they are in a close relation with each other, and it is always performed through the influence of the mind. A constant observation of the features of another person will in the course of time influence the observer's mind to such an extent as to create a corresponding appearance of features in the observer to a small extent. It is often noticed in married people, and it is sometimes the means of a modification of the animal features.

No other means of changing the form or appearance of one species of animals by another is operated, and it is wholly insufficient to change a creature to any great extent. Climate is capable of effecting a change only in the covering of the animal, and it is always apparent in giving them either a rind or hair. The rind is the result of a warm atmosphere, and hair the result of a cold atmosphere.

In these few changes produced by the environments of the animal creations there are all the changes of any character that are possible in the forms or features of the animal.

Now if this wisdom of the Creator is not a sufficient overthrow of the doctrine of what is known as the survival of the fittest and a natural selection, will our scientific teachers who accept that doctrine inform the world what produces a change in the form of an animal at the present time, or what did ever produce a change in the form of the animals of the earth? This character of work if it is stated correctly conveys all the changes that ever took place in the animal kingdom in respect to their forms, and if it is a fact that the forms of animal species were ever changed or can be changed in any other way

it is the duty of those who claim this to show what process or what law is operated to produce the change.

The survival of the fittest, means nothing more than that the unfit, or what are classed as unfit, perish from natural causes. Natural selection means only the same thing, except that in the destruction of a part of the animal kingdom a destruction or devouring of the weaker by the stronger took place. Both terms mean that in the chances of existence the less qualified to withstand the vicissitudes of the countries in which animals existed were overcome and destroyed.

Now these propositions are very rational and very true, and it is unnecessary to inform the readers of this article that the same destruction of life and species is taking place to-day.

The very same kind of selection of the fittest, and survival of the stronger is seen in all countries now, and in all parts of the world where an animal is seen.

What is there in this destruction of a portion of an animal species that creates a difference in the form of any of the members of that species? or what does a method of destruction do toward creating a new species

In this work of the great naturalist, who thought that our own race was merely a family of monkeys in disguise, and that all animals were abortive productions from a creation of animals that we could never discover, there is no other attempt to account for the diversity of species, except what is stated in respect to natural selection, and a careful observation of the effects of the law of heredity. And in his comments on the law of heredity he nowhere ascertains that a construction of any peculiarity of the nature of diverted or abortive growth is even increased or cultivated in its transmission from parent to offspring.

It is, on the contrary, a fact that it is always obliterated in the course of time. What a comment on the wisdom of this great sophistry of an eminent observer if it is a fact that in the transmission of peculiarities of the form or character of an animal, only a temporary existence of the peculiarity is permitted, and what a ghost of a philosophy of evolution is this work if the selection of the fittest, and the transmission of peculiarities are incapable of creating a change in a creature or a different organization!

What a comment on the wisdom of a whole world of scientists, that they cannot examine this question in a way to discover that only a mere sophistry is built up in the so-called evolution of the species!

Let us ask all who have noted our explanation of this, if they can discover what will create a new form or a different species of animal, if all that is stated in that work of the great naturalist is true? Ask all who are capable of understanding it what the change is that is supposed to be accomplished, and what produces the change?

In no instance can be shown the power that does either, and the author was honest enough to admit that it was not disclosed.

Now in reference to other species of reptiles, it is only necessary to state, that in each, there was a different order of plant that constituted its origin. The alligator is but little different from any of the lizards, and all such are as capable of affording us a chance to discover their origin. In their shells and their horns, and in their way of obtaining a living, there is only a faithful caricaturing of the plant that gave them existence.

We will conclude what we intend to offer of this description of reptile origin in the next chapter, and shall then endeavor to discover the origin also of what are known as mammals.

Chapter VI.

We cannot consider the reptile creations a mere class of lizards, or a mere class of alligators or crocodiles, or as a class of snakes, for all the creatures that are cold-blooded and crawl on the earth, or paddle through the water, are as much reptile orders as any one of such creatures. The name is only a term applied to a few of the creatures that are incapable of greater development than a snake or alligator. The use of such a term is simply an employment of a description of what are considered only undeveloped vertebratae, or if the theory of the evolutionists is correct, undeveloped birds.

The bird that is possessed of only feathers is not considered a vertebraic reptile, but one that is possessed of a shell to any extent, is denominated a member of the vertebrata

classes. No cause for classing birds with the reptile vertebrata exists, except that in a few species of the earlier bird creations, there was a considerable bony exterior. There is, perhaps, no well defined line between a reptile and the more advanced orders of animals, but it is safe to allow that all the cold-blooded vertebræ are reptiles.

It is our purpose to discover the origin of such as are most familiar to the reader, and when the origin of all animals is known, the different orders will be denominated, only according to their rank in the scale of existence. The method of their creation, and the method of their unfoldment, will, if understood, enable the scientific investigator to arrange the catalogue of animal names or descriptions, according to their period of unfoldment.

No arbitrary and irrational denomination of the species will be permitted or adopted.

When a whole class of the teachers of science can agree on what produced, or what developed an animal, an agreement can be had on a term of description.

Now all the turtles of the earth are carrying on their backs an exhibition of what gave them existence, and the source of their origin is so plainly and artistically engraved on these covers of this class of reptiles that the student of nature as he gazes on one of them, and compares it with the object that allowed an origin for a turtle, will wonder why in all the periods of man's existence, the origin of the turtle has not been discovered. The same beautiful orders of adornments are seen on the back of a turtle as on the coral itself, and in the shape of this creature there is a good profile of all the bunches of coral that are constructed in a heap and without branches.

The only difference in the shape of a turtle and a bunch of coral, is in the arms and legs and head of the turtle, and in the animal's construction, there is a chance to discover why the head and legs or arms were given it. The body of the turtle is without bones, and on the underside of the upper part of the shell, there is a partial development of a back bone and ribs. These beginnings of a back bone and ribs are sufficient evidences of the truth we are now to state. In the decomposition of a heap of coral the only object left undecomposed was the linings of the cells that constituted the coral. These linings of the cells are the same kind of creations that constitute the linings of the cells of all plants, and the animal and human organizations.

When the grosser part of the cells were cleaved from these linings, there was a coral only in the condition of a phantom or soul. It was no more nor less than the united linings of the cells of the coral, and these linings were only the influence of the coral development so slightly consolidated as to be invisible, and at the same time be able to retain the organization of the turtle, and its representation in an etherial condition.

Every turtle that exists, or ever did exist, was only a developed coral clump, so far as its origin is concerned, and in every climate and country these converted coral exist as well as the original coral.

The corals of our country, or its shores, are only a simple construction compared with those of warmer climates, and the turtles that abound in our latitudes are only a simple affair compared with the creatures that derived their existence from the more extensively developed corals.

The thousands of so-called animals that are attached to the rocks and mud at the bottom of the ocean, are in every instance only a greater development of a coral, and every species of algæ or crinoid in the ocean, is a coral a little more developed.

These facts and the decaying of land plants in the water, accounts for the great variety of fish, or what are called fish, in the ocean, but which are only a little further developed algæ, and crinoids, and land plants. In the variety of the fish of our oceans that are given an existence to-day, there is not one species whose form cannot be found to be but a copy of a coral, or a particular form of plant of the water or land. The geologist who is so anxious to discover whether after all the crinoid or zoophite is an animal, had better cast around for the fish that is copying these organizations in its appearance and habits, and the idea may come to the so-called investigator, if he finds this fish, that these peculiar plants are but corals more developed.

Zoophites are as well represented in the animal world, and in the many orders of fish in the sea or lakes, these partly developed plants are thoroughly represented. No where in the kingdom of animals is it possible to discover a creature that is not a representa-

tive of one species of plant, or of a being that was derived from a plant or animal substance, or from both.

Now, all the fish of the sea are the faithful copies of all the plants that have grown or perished in such waters, and the crusted creatures that are in no sense fish, except that they dwell in the same element, are only copies of the corals of such waters.

Let us ask all who are capable of obtaining a natural history, and a copy of any geological work, to compare the animals of the ocean with the plants that are developed in such waters, including every species of corals, crinoids, zoophites, and algæ, and such land plants as perish in it. No other evidence will be wanted of the truth of our theory than such a comparison will afford.

Let it be done in order to show whether we are deceiving our readers.

The only difference between a fish and a plant that was converted into a fish, is in the way a plant, when converted into an animal, was given the organs that capacitate it for independent motion and the other manifestations of life that the plant could not produce.

So does every animal possess only a greater capacity for motion and the manifestations of life. No animal is anything more than a plant more developed and rendered capable of acquiring an existence through a system of obtaining nourishment from objects that are capable of giving it nourishment.

No order of animals are compelled to obtain their sustenance from the soil, or what is connected with soil in the form of earth or rock or decaying wood, but every species of plant is produced from the earth, or such substances on it, and it is dependent on the earth, or such substances, for its nourishment and power of development.

This difference in the two orders of creation is all that creates a dividing line between the two kingdoms. A plant that is so developed as to become an animal is released from its connection with the earth and it thenceforward is able to do its own work in the way of obtaining its means of existence.

This is all we care to advance concerning the portions of the animal kingdom that are less developed than the mammal species, and it is all our readers will need to enable them to pursue the work of disclosing the origin of such creations.

Now let us examine a different class of organizations; one that is more developed, and which is more in keeping with the character of the present unfoldment of the vegetable kingdom. Of course there are no animals of this class that are created now, and there is no one of such creations that was developed or brought into existence since man was created except the elephant and camel. The camel is in a condition of development that is capable of giving us another example of what a heap of dead bodies can evolve. The whale and elephant are productions from both the plant and animal creations, and it is as well to admit that in this old courser of the desert, that is so faithful and so attached to man, there is but a construction from the decomposing bodies of the tribes of the same countries that were wanting such a creature to carry their burdens from one part of the country to the other. This most useful creature was only possible from the decomposing bodies of the original inhabitants of the countries where the camel exists, for in no creature or plant is there any construction that could be converted into the astonishing contrivances that render this creature capable of bearing such burdens and existing so long without food or water; only a calculator of a divine character could supply these people with the means of transporting their goods and themselves across the waterless desert, where any other animal would perish. It is as plain an example of the wisdom of creation, and of design in the affairs of nature as though the design and the use of the animal was written in letters in the sands of the desert by the finger of the Creator.

The places where a camel is needed are the only places where it is found, and the degree of civilization that the people of such countries acquired rendered this animal a necessity, and it would have been impossible for them to have acquired such civilization without the aid of this creature. "It is only a mere operation of law," says the agnostic observer, "that is producing everything in nature," and it is only a mere operation of law that affords the animal a means of existence, says the same observer, and it is the mere operation of law, he says, that is giving us a means of investigating the works of nature. No other philosophy is needed than an operation of law, this wise thinker is claiming. and it is only an operation of law that is giving a law a power of operation, he also

claims. Now if all the operations of law were accounted for by discovering the cause of the operation to be a previous operation of law, it must follow that a previous operation of the will of some person or individual of power of will is the previous power to the first operation of law, and if there is a previous will operated to produce the first operation of law, why are we compelled to assume that it can operate only in projecting the first operation of law? And why are we compelled to assume that any operation of law is produced by the operation of a previously operated law, if a cause is not apparent, or where the operation is only a continuation of the same law. There is only a continuation of the operations of law where one operation is the means of the execution of the other, and if the one first operated is checked the other is only deprived of what will continue its work.

When a work of natural law is carried on, no matter what its character is, there is always a sufficient control of its operations to prevent it working any destruction beyond what the designs of creation will permit. Now what will the cause be of the certain operation of other influences which are capable of limiting the destruction of the Creator's designs by any operation of law. In each cyclone there is power to devastate a whole globe if the operation of the force is continued and allowed to whirl over the earth, but it is wholly controlled by a work of law in another direction, and in a way to cause it to perform only the character of work it was created to perform; and besides this destruction of its power there is a use made of the agent that destroys the cyclone, and it is only one of its offices to check the furious onward career of this bezum of destruction.

Now all that can be seen of the operation of law in any direction is the performance only of the creation of a thing that is designed for existence, or its destruction when its office of existence is performed. In these two purposes or results of the operation of law there is all there is ever performed in their operations, and there is no work of any character in the way of effect of natural law but the creation and destruction of the objects of creation.

One is all the while creating, the other is all the while destroying, and the latter keeps pace with the former, and in all the affairs of nature they operate in perfect harmony with each other.

No power is greater than the one that creates, and none is greater than the one that destroys. All of the creations of the universe are undergoing a change, and only an advancement of the universe is the result. What advancement could there be if a mere uncontrolled force was operating to perform a change in the condition of things, and what could create any harmony or equilibrium of forces if it was a fact that all forces are uncontrolled by any will or mind capable of originating the affairs of the universe?

No power is more apparent than the power that maintains an equilibrium of the forces that are operating to create and destroy what is created.

This little departure from our object of discussion is only to enable the observer of the statements we are intending to make and have made in reference to the designs of creation, all the more capable of seeing a finger of a Creator in all the affairs of nature. What a pitiful expression there is in the face of the camel, and how well it resembles the faces of the people whose earlier existence was only a degradation and suffering.

The bowed and humiliated character of the neck and head of this animal, is a perfect exemplification of the degraded and bowed spirits, whose necks were perpetually under a yoke of a brutal tyrant, and the hapless features of the camel bespeak the suffering of a people whose backs were scorched in the sun, or flayed in their toils, and the contrivances for punishment by the tyrant.

What an example of portraying to the present day, the suffering and degradation of a people whose existence was far beyond the reach of any history.

In the eyes of the camel is seen the eyes of the inhabitant of the country where this animal dwells. In its forehead there is seen precisely the same presentation of skull and brain as is seen in the inhabitants of such countries. In their noses we see only human noses of the same races. In their whiskers a beard of a human being is seen. In their lips there is a human capacity for preventing the disclosure of the tongue and teeth, while the animal is eating, for their lips, like the human lips, allow them to eat without showing the whole interior of their mouths.

The ladies of our best societies would not

feel satisfied with their smiles and polite manner of eating, if they were obliged to disclose all their teeth and their tongues, and gums, every time they smile or open their jaws to crush a bit of food.

The camel can smile and eat without appearing so much like a ferocious brute, as the other animals do. If this good animal could raise his eyebrows, when he desires to exhibit a little pleasure, the smile of the camel would be as marked as that of a human being, who is capable of smiling. A chance to learn what the eyebrows can do toward perfecting a smile is obtained by attempting to smile without raising them.

A grin like that of a bear or hyena will be the result of a control of these operations.

This very docile and useful creature, the camel, is only a construction from the decomposing bodies of just such people as possessed the heads and faces and countenances, and bowed spirits, that are possessed by the animal. The humps on their backs are only a result of the stacking of dead bodies in the tombs, as a stack of wheat is stacked, and it required the gases and decomposition of the whole stack to produce a camel. In this transformation of the emanations of a number of the human beings that were entombed together where a decomposition of their bodies was possible, there is a chance to discover what will surprise all our christian and spiritualist teachers more than any thing that has yet been offered in the columns of this paper.

It is only the soul of a plant or animal body that is converted into a better creation, and it is the souls of the human beings that were too undeveloped to be able to possess a means of existing in any other world than this one, that were converted into what would be of use to those that were living.

In this very astonishing fact there is to be seen a carefully prepared arrangement for another existence in the orders of men that are capable of another existence, that will be disclosed, and it shall receive our attention when we arrive at the discussion of a spiritual creation. It is quite enough at this point to state that we do not learn of the existence of the most undeveloped savages or undeveloped inhabitants of a degraded character of people in a heaven of either the christian or the spiritualist, and if they are in such heavens they are retired to the back part of it, if the front is the one from which we have heard the apostles and prophets, or the departed souls of more recent inhabitants of our globe. The mind can be satisfied that a very wise provision was made in the heads of all human beings for a proper selection of those who could enjoy and appreciate a spiritual existence. This arrangement shall be disclosed before our present article is closed.

A camel is able to give us a complete description of the faces of the beings that furnished it its origin. Let a comparison of the faces of camels and the more Arabic portions of the Jews be made.

If the resemblance pointed to is deemed a work of the imagination, the comparison can be made by any of our readers who will observe the faces of the Jew, and the features of the faces of the dromedary.

If the dromedary is supposed to be older than the race of people from whom the Jews were descendents, it will be well for such persons as claim this, to inform us where and when this race had its origin.

No other race is capable of affording so much evidence of its claim to a kinship with the camel, and it does look as though that all the other races would forego this distinction. The greed of the camel is only limited by what it cannot devour, and the Arab is only content when a treasure is beyond his reach. A Jew will be contented when the treasure is beyond the reach of any other person.

A sack peddlar is able to show where he acquired the habit of transporting goods in sacks on his back, and when we describe what Mr. Darwin was pleased to call heridity, we will call the readers attention to the great capacity of the Jew, of the more recent centuries, to acquire what was a habit of the camel in carrying goods of the commerce of the eastern shores of the Mediterranean and the cities of the Asiatic countries. Every Jew, whose pack of wares is slung on his back, and who is coursing the country as a camel courses a country in the east, is but copying a trade of the camel.

Now, where shall we find the origin of such cruel and ferocious creatures as the tiger, the lion, the wolf, the bear, and all such animals as are capable of exhibiting fierce and destructive capacities?

Every ferocious and destructive creature that is capable of devouring another animal

is given an organization that impels it to the acts that it performs. The character of the organization that is capable of a violent and destructive act is obtained by the creation of a great width of brain, or what should be called a great battery of the very force that is operated in the animal's acts of force and destruction.

This fact is always observed in the construction of the heads of all animals that are capable of destroying each other or those around them. The power that is operated in the head of a tiger in its work of destruction is the same that is operated in a person's head in compelling him to destroy human life or build a city or railroad, or perform any great work of the will.

The difference in the character of the work that is performed by the human species that is instigated by a breadth of brain, is caused by the difference in the construction of that part of the brain that directs the employment of the power. The difference in the capacities for directing the employment of a great force of the brain is all that renders man capable of getting a living by peaceful pursuits, and it is the absence of such a great force in the species of animals that exist on vegetation that enables them to content themselves with a vegetable diet. A vegetable diet will satisfy the batteries in such animals' heads, but only the exciting influence of the blood and other corpuscles of an animal will satisfy the batteries in the heads of the species of animals that are carniverous. Now the whole cause of the ferocity of a tiger or of any animal is the possession of what will in a short time exhaust the strength of the animal if it is not supplied with the magnetic force or influence of another animal's blood and flesh. This craving for a fresh supply of this force is all that makes a tiger or bear come from its lair and destroy whatever animal it can overpower. This operation is of precisely the same character as that of the unfortunate person whose blood is so accustomed to being stimulated by alcohol that it is in a partially abnormal condition without such an exciting influence.

This being is anxious to obtain the exciting influence of such substance, and the character of the liquor is capable of giving the blood excitement by decomposing the stomach, as well as the substances in it. The same philosophy is observed in the person who eats opium, and it is seen in a proper operation in the desire of the child or any person to get out of doors, where the air can furnish the blood with the best prepared stimulant the animal kingdom ever consumed. It is merely the electricity of the atmosphere.

Now what operated to give one species of animal so broad a brain, while another was allowed a brain only partly as broad? And what operated to give either a brain of any character?

A brain is only a mass of cells of the same character as any other cell of the body, except that the brain cells are constructed from the blood that is sweeping along the spinal column and the many small blood vessels that meander through the brain. They are generally greater than other cells of the body, and this is the reason the brain is so much greater in proportion to its weight.

Now when an animal was derived from a soul of a plant it could obtain a brain corresponding to the circulation of the plant that afforded it origin. Every plant that is able to afford a soul of its creation for an animal organization can create a brain in the animal as great as its own organization will produce. The foliage of a plant is the measurement of its circulation. When the circulation is employed to construct a brain, a corresponding amount of work is the result. The *arbor vitæ* is but a changed position of the top of the plant, and it is the paladium of a brain. From the commencement of the unfoldment of this top of the inverted result of circulation there is only a greater or lesser outgrowth of a construction called brain. No animal is capable of commencing a development until this *arbor vitæ*, or what answers for it, is unfolded, and it is from its construction that the other parts of the organization are unfolded. No one is able to comprehend the reason why a brain is so much the shape of the foliage of a tree, and why a branch of the plant is so plainly observed on the folds of the cerrebellum. We can assure the reader that the cause of this appearance of the plant in an animal brain, that is developed in all species above a fish, is the fact that all such animals are developments from plants, and the fish would display it as well if their brains were developed as much as the brains of the higher organizations.

Now the amount of brain of any animal will correspond to the development of the

plant it was derived from, and the plant's development is always known by its foliage and fruit.

The brain is in respect to this unfoldment a perfect illustration of the truth that a plant is only given a further development in an animal organization.

The brain will correspond to the development of a plant that afforded the animal its origin, and in this most important fact a whole volume of the testimony that discloses the truth that a plant kingdom was the origin of the animal kingdom is to be observed. The advancement of the plant organizations are thus copied in the advancement of the animal species.

The only way to advance the character of the animal species was to employ the more developed plants in their creation. When a plant is given a foliage of the character of leaves, it can produce what will originate an animal with a brain capable of giving it a power of considerable importance in the way of sagacity and of comparison and caution and sometimes of reason. This is oberved in all the more advanced orders of animals, and it is only possible when a vegetable production of a more developed character is the source of the existence of the animal.

If we can discern what enables a horned animal to exist on vegetation, and caused it to use its horns only in its defence, we can begin to discover why a broad headed animal is capable of exerting a force of will that is not possible with the horned animals. Every animal that has horns, except a few reptiles and fish, is existing on vegetation, and many of the herbiferous animals are without horns, and whenever we see such hornless devourers of vegetation, we find an organization that is disqualified for destroying other animals, except the very small creatures that annoy them.

In every instance of this character, the head of the animal is narrow where the head of a ferocious beast is broad. The horns are omitted in all species of animals whose brains are so narrow that a force of construction sufficient to construct horns is wanted.

The heads of such animals as possess horns are always broader, and it is the development of horns, or in other words, the employment of their brain force in their construction that incapacitates the animal for a life of combat and destruction. The bulls of the bovine species, and both cows and bulls of the bison family, have short horns, and to the extent that they are deprived of growth of horns are they combative and made capable of protecting the herd.

In a deer we see a horn that is calculated to protect the animal's body in a wood, and only in a defence where flight is impossible will they use them against an adversary.

Now, there are no horns on a tiger, or any of the ferocious quadrupeds whose food is flesh, and the force of the brain that is employed in constructing horns on a cow or deer, is in such animals employed to contract the muscles of the beast, in its leap upon and destruction of another animal. This force, if not allowed to be operated in this way, will keep the animal contracting its muscles and spreading its claws in pacing its cage, and it will destroy the beast in a short time, unless the animal is given a great quantity of blood and meat.

It was very important that a portion of the animal kingdom should be carniverous, and the other portion herbiferous, for if they were all herbiferous, a few, or perhaps, a single species would propagate sufficiently to cover the earth: and if all were carniverous, they would prevent the perpetuation of the species by devouring each other. What a comment this is on the idea that all creations are the results of a blind force.

We can discover the origin of a tiger, if we can imagine what a decaying zebra can afford a slimy and warm pool of a swamp, where the grass that is decomposing, fills the air and water with the same kind of emanations as the body of the zebra is affording them.

Imagine what would rise from such a damp and filthy condition of substance, and you will observe what constituted the origin of a tiger. This beast still finds its haunt or lair in the place that its origin was in, and it never leaves it unless forced to do so by hunger. It sleeps and yawns where a dead bra died and decayed, and the stripes of this fierce brute are copies of the zebra's stripes, and the long and uneven hair on its belly and throat, are copies of the grass that also decomposed in the same swamp.

A whole catalogue of creations can be accounted for in the same way, and it was only a log of some plant and its roots and branches, that afforded the origin of the

separate species of animals that had not their origin in the dead carcass of another animal.

The lion lies and sleeps where his origin lie and decomposed, surrounded by the bones and teeth of the animals it devoured. This beast is only a greater development of the hyena, and it resembles this worst of all creatures in its habits and disposition, and in its mane and tail and general shape. A cavern strewn with the bones of animals and reeking with the filthy atmosphere of decaying animal matter, is the delightful corner of this great and ferocious creature. A hyena was the occupant when the lion did not exist.

No animal is so cowardly as this great creature, and it is only a great hyena subsisting on undecayed flesh.

This is all we can offer of the disclosure of animal origin in this chapter, and our work shall commence in the following chapter at the examination of the origin of the other portions of the carnivorous quadrupeds.

Chapter VII.

The further examination of the origin of ferocious animals will conclude what this article is intended to contain concerning the construction of the creatures that are conversions of the less developed plants into what are only a plant with greater powers of motion, and greater capacities for the reception of impressions.

The character of an animal will always furnish a means for ascertaining what species of plant it obtained its existence from. In reference to the degree of development of an animal, the same amount of unfoldment of organization compared with the greater development of the vegetable orders, is observed as the animal bears to other animal organizations. The only difference in the orders of animals is in their degree of development, and every change in form is a consequence of a greater unfoldment of the means by which a current of the agent of all life and motion is operating to give life and motion to the animal. The very agent that produces life and motion is the influence that is accomplishing the development, and its accomplishments are only constructions of the means for its greater activity.

This unceasing activity of what created the universe, will not be discontinued until the world is all converted into what it was designed to produce.

It is only a commencement of the conversion of a world into what will be a habitation for the human soul, and into such souls that is seen in the infinite varieties of operations of natural law. A corpuscle in a channel of the circulation of one's blood is acted upon by this same magnetic agent, in the sweep of its current around the system, and it is finally converted into the influence that is accomplishing the conversion, and this influence is again converted into a corpuscle and one of a better character. This effect is seen in every cell of the body that is covering the orifice of the escape of the influence.

Now, in our solar system, a corpuscle of a character almost the same, is being acted on by the current of this agent that is sweeping around this greater system. The result of the decomposition of this greater corpuscle is the construction of a cell as large as the original corpuscle, and extending quite around it.

The analogy is as perfect as an example of correspondence can be, and when a scientific class of minds can comprehend that only one force is operated, and one method employed to construct every organization in the universe, it will be possible for them to see that a current of what is called electricity is sweeping between the orbits of the stellar bodies, as it is sweeping through the orbits of the revolutions of the corpuscles in our blood and that it is actually performing the same character of work in both systems.

What a satisfactory understanding of our solar system it will be, that can ascertain that only a great organization of force and corpuscles is absolutely operating to convert the corpuscles into better characters of creations!

What a wonderful contemplation of what was designed by the Almighty as a means for creating both the spirit and the spirit world! Nowhere on the face of the earth is there the slightest conception of this glorious, and, at the same time, the very simplest truth.

We can scarcely depart from this subject to continue the examination of the subject under discussion, for it is so important and interesting that it is our most earnest desire to disclose all the essential truths concerning the institution that, to this hour, in every part of the world, is supposed to be an unexplainable universe.

We cannot drop so important a subject, and to which we have adverted only for the purpose of detecting an analogy, without stating that all that has ever been observed in the heavens, of stellar creations, or stellar or cosmic phenomena, is included in the solar system.

This most astounding proposition is as easily established by proof, analogy, reason, and mathematics, as the fact that the human body contains as many organs as an animal body, and some more. When the discussion of astronomical affairs is reached in this paper, we will offer the proof of what is now stated, and a challenge will accompany such proof, to all the astronomers of the world to combat the proposition. The challenge will not be accepted, and there will be only a mere untruthful and hypocritical denial of our disclosures.

Now let us again consider what could originate an animal that is ferocious, and afford it a way of disclosing its origin!

All carnivorous animals of the greater orders of life are considered less developed than the more gentle and inoffensive orders, and the domestic animals, excepting the dog and cat, which are carnivorous, are supposed to be the most developed of all. This supposition arises from the facts of the tamable character of these animals, and the greater development of their organs and their beauty and associations with the human family. It is not obtained from any understanding of the methods of their development, nor by any data as to the source of their existence, nor from any understanding of the causes of the difference in the character of such animals and those supposed to be less developed.

The only evidence of a substantial character of their greater development is found in the meagre amount of fossils of the different species of animals, and this evidence only points to the fact of a later creation of the domestic animals.

In the use of such methods of investigation as are employed by the authors of science, it can never be ascertained what gave these animals a character of greater usefulness to the human family, and a docility of mind that afforded man a safe and harmless character of animal associates.

The only way to discover what could qualify a horse, an ox, a sheep, a mouse or hog, for existing only where human beings exist, is to ascertain from what they derived their existence.

Now, a whole volume of evidence of the origin of such creatures is capable of being read by any one, and in the reading there is disclosed the volume that contains the evidence of the origin of the carnivorous and ferocious orders of creatures. We have repeatedly stated that all the habits of a plant are repeated by the animal that was derived from it.

It is in this fact that we can discover why the good and gentle domestic animals were created to be so useful and beautiful and gentle.

The cypress, fir, pine, spruce and hemlock and several other species of plants are clothed by a construction of boughs, and what may be considered hairs, that are constantly protecting these plants from the cold of winter or of the colder latitudes, and they are not allowed to be destroyed when a construction of additional boughs or clothing takes place. These coverings of such perennial plants are calculated to deprive the plant of a means of exposing their orifices for the escape of the substance of growth to the influence of frost, and if they were not thus protected, these plants would decay.

In the case of every plant whose foliage is so developed as to permit its leaves to decay and drop from the bough each season, there is a construction of a leaf on a stem that will continue to exist on the plant when the leaf is decayed, and this stem is such a small production on a twig that it cannot allow any great influence of cold to operate on the plant; and in addition to this means of protecting such plants from the cold, the twigs are allowed but a small number of stems for the development of leaves, as compared with the points on the twig of the perennial plants described. Let our readers remember what is now stated, and let them compare the base of one of the stems of a leaf that has fallen from a plant with the base of a hair that falls from the cow or horse in the spring of the year.

A comparison of such a stem can be made with the hair of a human head that is pulled out. Now every animal whose origin was a plant that shed its leaves when they were completely developed, will shed its hair when the hair is completely developed. What a laughable example of copying of one order

of natural work by another, that is only a step in advance of the first. What a perfect illustration of the fact that a vegetable kingdom could be the commencement of the animal kingdom!

What a comment on the theory of evolution that every scientific author of much note is declaring is the final settlement of the question of the origin of species.

What a comment on the faith of a teacher of the gospel, who is willing to argue that a creature can be produced by a violation of natural law, and whose admission of this worse than false hypothesis, is only a result of a fear that a church will loose its control of its devotees unless it can accommodate itself to a bare fallacy of a good and mistaken man's proposition.

The usual amount of defference paid to the opinions of an eminent author was to be expected from all scientific authors, but it was not to be expected that a church would give a false theory an endorsement on account of a great popularity of the theory among scientists.

What better evidence of the worthlessness of the proposition can a thinking mind require than what can be found in the work of this author, where he points to the objections to his proposition. These objections to its truth are an overwhelming destruction of the hypothesis. If it were not for the absence of other propositions on this question, these objections of the author to the truth of his idea would have forever disposed of this proposition.

Now, when our article is closed, it will not be supplemented by a reference as extensive to any objections to its correctness, and for the simple reason that they cannot be seen.

Let us again commence the discussion of the origin of the domestic and wild and carnivorous animals.

The foliage of the perennial plants is copied in the constructions on the bodies of such animals as are compelled to carry their clothing unchanged from year to year. The horse is able to shed its hair annually, and it does it in a very slow and imperfect way.

This is a characteristic of the more advanced pines. These more developed species of pines are capable of casting off a part or the sporting branches that make it look in its season of greatest growth considerable like the oak or maple.

This more advanced order of the plant is seen in the greater warmth of the temperate zones, and the development increases as the climate is warmer. At a certain distance from the equator the plant is not seen, and a more developed character of plants takes its place.

This ability of the pine to deprive itself of an unnecessary amount of clothing, can be seen operated in the horse, for it is repeated in this animal.

The mane and tail of this graceful creature are parts of the boughs of this plant, allowed to grow on the horse. Every hair in the tail or mane of the horse is constructed like a point on the bough of the pine, and it will decompose as quickly. It is the capacity or the hair of this character to decompose fast, that gives the operation of the conversion of the hair into a worm, the means for the metamorphose.

Now, if the conversion of the soul of a pine tree into what gave our race one of the means for accomplishing its civilization, the plant will be observed in several other characteristics of this animal, and in the different functions of the animal's organs. A horse will never sip any food like a dog or cat and it will drink only pure water. This is the case with several of the docile species of animals.

The animal can obtain a whole emanation of a pine tree that is prepared in the tree's development and given the atmosphere after the whole trunk is dead. The same characters are seen in this creature, and it will swing its head and toss its mane and tail as proudly as the great pride of the forest, and when it neighs and snorts on the plain, it only caricatures the groan of this giant plant and the blast of the wind on its godly top.

What a pride this creature feels in spreading its boughs to the blast and careering on the plain where its projenitor could only sweep the air for a short distance around its trunk.

The pine, a glorious unfoldment of a plant, the very picture of a crinoid, that grew and waved its tiny top on the same plain. What a lesson and what a grand spectacle to contemplate this transformation of a crinoid until it is capable of coursing the globe and assisting man in the ways of civilization. What a construction is this horse from that incipient creation that was constructed only of flint and a small amount of the hydrogen of the earth's crust.

What a grand display of the work of a sly agent of nature, whose foot prints are observed in every creation, and so splendily wrought in the plant, and animal and human forms. What a magnificent contemplation it is, to consider that in the sands of the shore, and mud of the valley, and the quartz of the rock, there is all that is necessary for the commencement of a creature that is allied to the Almighty, and whose complete development can be found in the hall of the autocrat, or presiding over the destinies of the world. No uncommon fancy is needed to discover that in the work of creation there is but a single agent of the Creator and one that is competent to accomplish all the work its Author designs.

So plain will this truth appear to the world at no distant future, that a whole phalanx of the skeptics of science will vault into an acknowledgment of the fact.

Now, we can examine this good animal, the horse, a little further, and we shall be sure to discover other evidences of a conversion of a pine tree into one of these creatures.

The old chap, whose back is arched, and whose growl is as hateful as the muttering of the earthquake, is seen pursuing one of these creatures we are discussing. The old bruin is afraid of the hoofs of the horse, and it runs at an angle with its possessor. The horse is soon outstripping his clumsy pursuer, and a halt is obtained to discover whether further flight is necessary. When it is found to be useless, a whole field resounds to the snort of triumph of a contest of flight with a great, cruel and voracious animal.

In this ability of the horse to speed beyond the pursuer there can be found the very reason why it possesses hoofs instead of claws, and its hoofs are only able to prevent the feet from sinking in the dirt, and to give the animal a means of a purchase upon its feet. No long and gradual change of a claw was necessary to give this useful creature a foot capacitated for its uses, and it was never done. The pattern of this foot can be found in the spindles of the bough of a pine tree branch, and a passing of the hand under one of these bunches of spindles, and pressing one side of them against the other, will furnish the copy as well as the origin of the hoof of a horse.

It is useless to claim that a claw is capable of giving a preparation for a hoof, for a claw is but the developed branch of a plant, and in every instance of their possession by an animal the possession was acquired from a plant that possessed branches that were sufficiently developed to give them a division into other branches.

This important evidence of a construction of animals from the emanations from plants is observed in the absence of claws in the earlier creatures of the water and land.

The hoofs of the camel and deer, and hog, and bison, and other animals that possess divided hoofs, are only constructions from the decomposed marrow in the bones of the leg, and which is allowed to consolidate into two claws instead of five.

The very same philosophy that gives the human hand its nails is operated to give the bear or tiger its claws, and all the animals of any character the claws, teeth, horns or tusks that they possess. In each of these constructions there is only a waste material of the marrow of the bones or nerves or brain that is consolidated sufficiently to produce the organ.

Our optic nerves are all the while discharging the same kind of claw-making substance, and it is carried to the nostrils, where we are able to claw it out by employing the claws on our hands.

In the marrow of every nerve and brain and bone there is a constant decomposition of the cells of which this substance is composed, and all the decomposed or partly decomposed particles are discharged at the surface or at the ends of such masses, and it is the amount of such decomposed substance that an organ of this character can discharge, that is found in every claw or hoof or horn, or tusk or tooth or nail or eye that is or ever was constructed.

The size of the bone or marrow in it, and the size of the brain or nerve will determine the amount of construction by the decomposing process. If a horse acquired its hoofs by a curtailment of this process of developing claws, an animal as great as a small mountain would have been necessary in order to have given the contracted claws a size of a hoof of a horse.

This argument is only a mere attempt to bolster up a theory of development that is wanting in all important evidence of its truthfulness.

The possibility of an animal possessing

claws that were so large as to permit the existence of a nucleus as great as the hoof of a horse is a question to absurd for discussion.

No doctor or physiologist is going to deny that our hypothesis as to the construction of claws is correct, and it is only a proposition that can be seen in operation in every animal in existence.

This same philosophy can be found to be illustrated in the jaws of any person whose teeth are still in his head, for the greater teeth will present a shape corresponding to the points of the nerves that terminate in them; and the same is true of the smaller teeth. When a tooth is lost a greater activity in the nerve of the adjoining tooth will take place, and if it is increased by the loss of more than one tooth the existing tooth will increase in size.

The hoof of any animal will contract if the marrow in the bone of the leg is destroyed. It is in this fact that a destruction of the theory that a shrinking of claws will create a hoof of this character can be found.

A hoof is only a great construction of a character like the nail on the finger, and it is destroyed by a decomposition of its substance. If the constructing of the hoof is prevented by any destruction of the marrow in the bones the hoof is sure to fall of, and a new one is impossible. Now, the only thing that can prevent a construction of hoof is the cessation of the decomposition of the marrow in the bones of the leg. If the decomposition is stopped the hoof will not grow.

No author of science will claim that a cessation of this decomposition of marrow will be produced by the fact that an offspring of the orohippus, or any animal, is smaller than its parent.

Such a difference in size would simply render the claws of the animal smaller.

This is all the change that could occur from the difference in development.

Now, it is only necessary to give the reader a still greater amount of evidence of the plant origin of the horse in order to allow the theory of evolution, as now accepted, to pass out of his consideration. In the milk of this animal, and in all creatures that produce milk, there is a chance to find what was operating to produce milk in the plant. Every plant is capable of producing this class of corpuscles to some extent, and in the greater plants it is produced in a considerable quantity. On the pine tree it is seen oozing from its branches, and its trunk, and it coats the places of its escape, as well as the milk of the cow will coat the cloth it soils. These genuine corpuscles are just so many cells of the plant that are constructed on its surface that are not needed to construct the tissues of the tree. They are as capable of condensation into wood as the other cells of the plant are, and wherever they exist in one locality on the plant a sufficient length of time they are actually converted into wood.

A plenty of examples of such a character of growth can be found on the spruce and the fir. A boy who is living in the country where these plants exist, will inform the scientist that it is often the case that a plump appearing item of such corpuscles, usually called gum, is only a portion of the wood of the tree with a slight coating of this gum around it.

In this capacity of the plant to give the outer surface of a year's growth a coating of useless corpuscles, there is seen all the philosophy operated in the human or animal mother to give the product of her gestation for a season a comfortable dinner at the contracted parts of the cells on her breast.

In this straining of the blood of the animal or human female, of the sediment and burning portions of the corpuscles in it, and which produces in the glands of the breast a whole corpuscle, there is a copying of the straining process of the plant that produces a whole cell on the plants' surface.

Now, will the reader of this analysis of the process of creating milk in plants and animals allow his teacher of science a chance to observe this discussion, and when he has read it, will the reader not ask why the analogy of the operations is not some evidence of the fact that a plant was the origin of the animal? An author of scientific discussions should be able to show in what the error of a disputed proposition consists, and if they cannot show it, it is mere denial that is made.

In every country where a mammal is seen there is a milk-producing plant. Such an animal cannot be found where there are no such plants. A chance to discover the truth of this statement will be obtained by a glance at the older countries of the earth, and the fact noted that only where there is a development of plants as great as there is in this

country will there be any great variety of mammals. This is disclosed by the paucity of such animals in all places where it is too cold or too hot for this character of plants.

On the equator only a few cat-like creatures are found, and near the poles only a mere bear.

We can assure ourselves that an animal could not produce milk for its young if it could not obtain a separation of the undecomposed corpuscles of the blood from the partly decomposed portions, for it is a fact well known to the profession of medicine and to physiologists that a portion of the blood is actually strained through the lacteal glands of the body of the animal.

The only important fact connected with this operation of which such professions are ignorant, is that only undecomposed corpuscles are passed through such strainers.

It is the burning corpuscles that give the blood a reddish color, and in the milk the corpuscles are all transparent.

The milk will appear like water when seen through a magnifying glass. The white color or appearance is only an opitical illusion. The most interesting thing connected with milk is the way it is converted into butter, for the butter is solely the separation of the corpuscles from the water, and the fibrine which is obtained from the glands of the female.

This beautiful process is performed by so agitating the corpuscles as to give them a chance to settle in groups, and finally in a united mass. The process is identically the same as the separating of grain from the chaff by our old fashioned fan, by which the farmer kept the chaff and grain tossing up and down till the grain was in a mass at the bottom of the fan, and when the chaff could be removed by a dexterous motion of the fan. The motion consisting of pulling the fan from under the chaff while the chaff was in the air. A churn can be constructed that will agitate the corpuscles better than by any that has ever been used, and it will consist of a current of electricity being discharged through the milk. This is a very simple process, and a common battery is capable of doing the work. Let the experiment be tried, and it will be very soon copied by all the dairymen of the country.

In asking for a patent for the invention, do not forget that it will belong to the proprietor of this paper.

In our next chapter, we will conclude the comparison of the animal to the vegetable world, and commence the disclosure of the origin of the human races.

When our readers have observed what gave existence to the different orders of the human family, a whole nation of such beings will desire to subscribe for a paper that can discuss a scientific problem without being handicapped by a whole catalogue of absurd and groundless theories.

Chapter VIII.

When the consideration of the origin of the domestic and ferocious animals was concluded in the last chapter, it was stated we would in this chapter, conclude the comparison of plants with animals, and then consider the question of the origin of the different human races.

In finishing the task of comparing the two kingdoms, a work of considerable importance, and of a character quite different from any thus far observed, will be disclosed.

In each of the species of animals that are so well covered with a coating of either hair or wool or feathers, there is a means for ascertaining what renders the animal so sagacious, and so very sensitive to the smell of other creatures.

In our article on "The Offices of Electricity in the Growth of Plants," we argued that a plant was competent to convert a germ from its seed into a plant like itself, through the magnetic influence it exerted on the substance of the germ. Now, from this fact there can be discovered the reason why a dog is able to scent the presence of anything near it, and become aware of the coming of another dog when the strange dog is several miles away. The sagacity is only a continuation of the means afforded the plant of which the dog is a product, to communicate its influence to a plant of the same character within several miles of it. All plants are capable of causing the germs of their seeds to copy them, merely by photographing their forms upon their germs, that are in such a state of development as to permit the reception of the influence. No plant obtained its form or character in any other way, and it is seen in the effects of the influence of certain species of plants on the species of a similar

character in the same locality. The plant is quite as sagacious as the animal. It can afford a similar plant a degree of assistance corresponding to the amount of its own development and the susceptibility of the other plant.

All around the earth these commencements of animal life are accompanying each other in groups and forests, and they develop only in assemblies, and when unaccompanied by other members of the family they perish.

Every fruit raising person knows that no fruit is cultivated with success except when the plants are associated in groups of considerable extent.

The only reason for this is the fact that all plants are exerting an influence on their species at a great or short distance from them, and the influence is increased as the species are brought together.

A plant of the species known as pine apple will discharge an aroma of such abundance as to be smelt a thousand feet away. The magnetic influence that produces this aroma at that distance, and enables the organs of smell to appreciate it, will extend to the corners of a whole continent, and impress other pine apples of the form and character of the plant.

So will the influence of all plants that are capable of rapid growth and decomposition.

Now, some animals are as sagacious as such plants, and they are impressed with the existence of an animal of this species, even though it be many miles away, and so very sensitive of such impressions are dogs, wolves, and foxes, that they will actually call upon such distant companions, and ask them to call in return.

Every animal of this character can command the assistance of its kindred, and it will always be granted in a contest with greater animals, and also in the shape of a deposit of an alkali at the base of a twig or projection of some object from the ground.

The office of this alkali in such places is to inform similar species of animals that only a bare human society is in such neighborhood, or that no dangers are lurking there. This cause for such information is observed in the conduct of a dog at such index object, and in the manner of his course through a forest. The animal will constantly acquaint himself with the information obtained at the bush or post on its route in any city or country place through which he is passing, and will deposit his conclusion of the character of the place when it is favorable to the well-being of other dogs and himself.

It is a copy of the work performed by human animals, who are prowling over the country with only a purpose of obtaining food and shelter as they go. The tramp will chalk a fence or post at a place where a good meal or a lodging is given him, and for the purpose of informing other dog-like passers that a safe application for a dinner or lodging can be made there. The dog will not usually perform this warning-like work in a wood, and if it is in a great forest it will not do it at all, and it will only warn its fellow-creatures by a constant snuffing of the bushes and objects it passes, and then passing them by. It is only a continuation of a habit of the dog that is seen in the tramp.

Such specimens of the human family as are referred to are but those who are fallen in their associations with men, and actually rely on their dog-like instincts for the means of living.

When we discuss the origin of the human races the habits of a simple and weak-minded person will always be found to be like that of some creature of the animal kingdom.

No one will deny the evidence when it is pointed out.

Now, all that we desire to state further in reference to the origin of the domestic or ferocious animals is that all of these species are given the means of disclosing their origin. The domestic animals are only more recent creations of the animal world, and it was a more advanced plant that gave existence to each. No other explanation of their more docile and useful character, or their greater beauty of construction is possible. The cow, the sheep, the goat, and the horse, are but the products of plants that are most unfolded.

The sheep is caricaturing the thick and abundant plant that is covering the ground in heaps, and which, when covered with snow, appear considerably like the bunches of living creatures that stand out in a storm and become covered with snow as well.

The goat is only a greater clump of these plants converted into an animal.

The cow will show what plant it is a creation from by the character of the hair on its neck and tail. The willow branches are seen in the tail of this creature, and on its neck

there is a copy of the covering of the willow, the growth of which constitutes the mane of the animal. It falls on each side of the neck, and is parted at the top as the branches of the willow are.

Now, when all the evidence of the fact of a conversion of plants into animals is given, it will be seen that in what is stated thus far there is but a small portion of what can be obtained. Enough is already given to enable the investigator to continue the work of detecting the construction of one order of organization from the other, and ascertaining the position of each species of animals in respect to its period of creation.

In the coming numbers of this paper a complete description of the human and animal organizations shall be given, and in this description the causes of the development of each part of these organizations shall also be given. When the origin of the human races is discussed, the examination of the embryonic unfoldment of the animal and human offspring will be carefully made, and it will be of the utmost importance to the profession of medicine and other scientific inquirers if what will be stated is true.

We shall leave no part of the work untouched, and it shall be given the world in a way that will leave no doubt on the mind of the reader that it is correct. No excuse shall be given for a denial of the fact that a whole kingdom of animals is actually employed to construct human beings from, and that a nation in all periods of the world since man existed has been only what a class of animals or several classes of animals are capable of becoming when given a step of unfoldment.

A means will be found for constructing a good and wise people, where now only savages are born, and the means will also be found for completing the civilization of the inhabitants of the globe, and for perfecting the civilization of that portion of the human family that is supposed to be well civilized now.

We desire every one who sees this statement to cut it from the column of the paper, and place it where it can be obtained at any future time, and made a contradiction of what is now promised when the promise fails.

Now, under what consideration of the question of the origin of the human races can we obtain a glimpse of the commencement of such orders of creation? The greatest of the investigators in this inquiry are unable to get as much as a glimpse of the cause of the God-like creatures who are allowing every person in their presence to detect their origin in every feature of their organizations, and in their conduct, and in their organs, and in their work of development as they are unfolded.

The works of creation are all typified in this being, man, and in every organ of his body, and in every process of his development there is but a repetition of a work or process of creation in one or more of the operations of nature that are performed in the orders of creation before man, and including the very globe on which his feet are placed.

This is all there is of a being whose creation was a contemplation in the production of all that preceded him. The only offices of the earth, and plants, and animals, and all that was or is necessary for their existence, were to finally produce a being on whose brow a considerable imitation of the Creator could be observed, and whose soul could obtain an existence capable of everlasting duration.

This very creature is a final triumph of creation, and intended for an occupant of that other triumph of the Almighty, the sphere of creations where the soul is to obtain a more actual and consistent condition of existence.

It will only require a faithful and competent examination of the affairs of creation to discover that only a very temporary existence is given the human organization in this sphere of experience, and that a sphere as real and as competent for the soul as this world is for the body, is actually around this one, and as properly a part of it as the atmosphere of the surface.

In every step of the unfoldment of creation a chance to discern a calculation for the final purpose of unfoldment is given all the children of the earth and which is possible as soon as they are capable of contemplating the object of their existence.

In every organization of the earth, and in every animal organization, there is what may properly be considered a construction of the tiers of stones of man's creation.

In each order of creation there is what may properly be called a decade in the unfoldment of a final organization.

In each race of men there is what may properly be called a commencement of a final de-

velopment of the organizations of the earth.

In the development of a human soul there is what may be called a final triumph of the Creator, and in the creation of that sphere of mortal productions in which this soul is to find its abode there is what may be considered a still greater triumph of the Almighty designs of creation.

Now, in the construction of all orders of creatures below the human there is but a source of the orders of the human family, and it is from these orders of creation that a human being can be given an existence.

To this point of our disclosure of the beginning of animal and human existence we have arrived, and in the task of describing the origin of human organizations there is the most important and convincing amount of evidence of the truth of what has already been stated.

In describing the conversion of an animal soul into a human being there is a work of such vast significance to the human race that it seems as though a new order of creations of which the world is at present entirely ignorant is to be brought into the contemplation of mankind. The discovery of the fact that in the atmosphere of every country where animals exist there is a great number of what we are obliged to call animal constructions of an ethereal character, and that from a single object of this great ocean of these emanations from the animal kingdom the human offspring is created, will, when made and contemplated by all the discerning minds of the community, complete the discovery of the very wisdom of creation and its methods from the atom to man.

This is what is to be discovered, and it will be sure to follow an understanding of the propositions thus far advanced in this work.

No possible device for the creation of an animal or human being can be contemplated, by which a single being of any character can have an unfoldment, except the employment of a soul, or what may better be called an emanation from an organization that has been in existence.

We are aware that the Church is against us, and that all other classes are as much against us as the teachings of the Church and the authors of science can make them. This is, however, no objection to the advancement of what is going to be stated. All the disclosures of the truths of nature that science is able to point to as a result of its investigations, can be chronicled on a page of the child's primer, and it is only a mere traditional superstition of the old nations of the plains of Asia that is being accepted by the Church.

The discoveries of the wonders of photography, and which wonders are as yet as little understood as before they were observed, the discovery of the character of the orbits of the planets and moons, and the general features of the solar system, and which to this day are as little understood as before they were discovered, the discovery of the circulation of the blood, the cause of which, is, in this third century from the discovery as little understood as when it was observed, and the construction of a wire in a way to reveal the fact that the sun can pour electricity on the earth from its own current, and which fact is in no instance observed by the authors of scientific works, and the discovery of the fact that all the rock of the earth is merely a result of mud and sand that is hardened by the decomposing influence of the earth, and what is only a part of the crust of the earth in a different condition from what it originally was, and which facts are as little understood in respect to the world's operations as before they were discovered, are all the solutions of the problems of nature that are in the possession of the human family.

Now, this brief catalogue of the discoveries by the human mind are all that the children of the earth are able to bring to the altar of their Author as solutions of the problems He placed before them.

It is insufficient for a foundation on which to construct an assumption that the mind is unable to disclose anything further of the affairs of creation.

It is entirely too limited an amount of scientific work to justify the class of teachers who are supposed to be competent to accomplish a better disclosure of the affairs of nature than the author of this article, in saying, "You must demonstrate all the propositions you advance, or it will be a useless work for you to advance them," or to justify them in saying, "All the scientists of the world have examined these very subjects, and they all agree that the accepted theories of such things are correct." And it is quite insufficient to justify them in saying, "It is only a person who can experiment and test all he

advances by experiment that can reveal a truth of the universe;" and it can in no sense justify a person of any class of the community in saying, "Why! all the scientists are saying that the earth is a great ball of fire, only a little cool on its surface, and that it was able to construct its mountains by a huddling of the pieces of crust one on another, by the washing of the waves of this great ocean of fire, and it is of no use to tell me that a globe is not a ball of fire."

No discovery of the character we have mentioned was obtained by experiment or demonstration. Every one of them was demonstrated in the mind of the discoverer before a confirmation of them was made by the external instrumentalities of investigation.

No demonstration was wanted by the discoverer of the organized motions of the solar bodies to satisfy him that each body of the system was a part of the whole, and that a common arrangement was made for the operations of the whole.

No demonstration was wanted by the inventor of a telescope to satisfy him that Venus would exhibit a crescent, and change its aspect as the moon appears to change. He knew it would, and only toiled to get a glass that would enable him to see it. No demonstration was wanted by the anatomist and physician who could see that a current of life-giving substance was coursing the animal and human body. He knew it was the case, and it was known because it was already demonstrated in his mind. Others were incapable of observing it, and they were the persons to demand a demonstration. Even a professor of great note in Europe denied the fact after a complete demonstration of its truth by all the demonstration that an operation of natural law will permit being performed was made.

No demonstration was wanted by the giant mind of the printer's avocation to satisfy him that a current of electricity in the cloud was the same as a current on the amber. He knew it was the case, and only for those who did not know it was the proof given.

No author of science in any land can discover to-day what sent that current of electricity down the twine to the bottle, and when it is stated again and again what did it, they are as incompetent to understand it as the people who gaped at the old philosopher of the printing house when he gave the truth to the world.

All the projects of a mechanical character are useless without a demonstration of their utility. No one will deny this; but when a demand is made for a demonstration of the operation of a natural law, or the method of creation, a mere request of a scientist, who is demanding it, is made that a person who claims to see the method or the operation, shall himself assume control of the operation and perform a work of the Almighty.

No matter what a proposition may be, whether a disclosure of a current of electricity passing through a vein, or through a stream of the earth's veins of circulation, or whether it be a proposition that a plant will emit a fragrance only by discharging a current of this influence, or whether it be a statement of the fact that a current of this agent is sweeping around the solar system and among the stellar bodies, or whether it be a proposition that a human soul is a real and substantial creation, the investigator of the popular school of science instantly exclaims, "You must prove it, you can't make a statement unless you prove it. You will mislead people by saying things you can't prove." And when this is exclaimed, the savant is satisfied that a great destruction of the propositions is accomplished.

Let such a person prove that his blood circulates in his veins. He will be sure to stamp any objection to the theory as little less than sacrilege.

Let him prove that the current of electricity in the cloud is anything more than a flash of sunlight on the cloud, and that it only sends down a current of what Mr. Tyndall calls "sun heat rays." Let him prove that a whole heaven of stars are suns of other solar systems or of any systems. Let him prove that a great ball of fire in the sky is anything but a conflict of electricity, or that any of such objects are the planets of the solar system.

Let him prove that a ball set in motion in a vacuum will continue to move in one direction if not stopped by another body, and let him prove that a body in a vacuum can be influenced by one out of the vacuum. Let him describe if he can a vacuum.

Let him prove that only a class of scientists is capable of investigating the works of God. Let him prove that any considerable amount of nature is understood by them.

When a teacher of science can prove that a current of electricity is not all that creates what is called gravitation, or can prove that gravitation is anything but a magnetic phenomenon, he is authorized to deny any proposition of which he has no proof.

When a class of such teachers can prove that the universe is anything more than the solar system, and that any one of the objects observed in the heavens is outside of that system, any one of such teachers can properly deny what is inconsistent with his knowledge of creation.

When a geologist can prove that any glacial epoch or period of cold as it is claimed once existed on the earth, ever did exist, he may deny anything we are stating. When this investigator can prove that a mountain was constructed by any operation of the fire he claims is in the earth he may deny that it is error to deny this claim.

When any scholar can satisfy the world that a plant can develop without a current of electricity being discharged by the earth and caused to course through the plant, he may deny that any plant is grown in this way.

When a geologist can prove that a continent is not the decomposed substance of coral creations, and the decomposed mica of the earth's crust he may deny all that is claimed in this article.

When a physician can prove that any one of the theories of that profession that are predicated on the claim that a person is only a growth from the substance he eats, is correct, we will admit that we are teaching error.

No cause for any of the facts observed by the astronomer, or geologist, or botanist, or physician that are but results of the operation of a force are understood by any of such professions, and they are unable to give an explanation of them.

Now, where a class of such observers is confronted with an actual analysis of the operations they are investigating, they throw down the gauntlet in the nature of a demand for demonstration, and it is done without the slightest attempt on their part to employ their faculties in the investigation of the problem. It is but a mere admission of their own inability to discover the fact, and it is hoped by them that others cannot.

Every discovery of the operations of law is necessarily a watching of its work, and if sufficient care is taken to follow the operation it will be seen what it is doing. It is only capable of being watched, and no proof of its operations can be given except to point to the different offices it performs, and the effects of the performance of such offices.

What operation of a natural law can be demonstrated except by the operation itself, and its effects? Does the world whirl around the sun only by virtue of a fiat of the Creator? If so, what proof of the fact is there except the whirling of the world?

Does it whirl around the sun because an influence is whirling in the same direction? If so, what proof of the fact is there except the whirling, or similar whirlings of similar bodies? Will it be demanded that a proof of some other character is necessary, and that the whirling is not proof? If so, what is the character of proof that a current of any substance is doing what is seen, and what means of determining the cause is there except by a consideration of what a force of such a character can do under similar circumstances? All the affairs of nature are capable of being understood solely by investigating the conduct of the object and the force exerted, and the careful observation of such affairs is sure in the end to give us an understanding of the method. No one can prove that the old Missouri is coursing from the Rocky Mountains to the Gulf of Mexico except by tracing its course by actual observation. Who would have been believed, if the river had not been seen, in saying that it had its source in these mountains, and emptied into the Gulf, on account of the person having seen the stream at one point?

The operations of law are examined in precisely the same manner that the course of a river is examined, and it is but a mere execution of a law that is seen in the coursing of a river to the sea.

This old and stupid habit of demanding demonstration of the operation of law is as silly and fruitless as the clamor for an armful of money by one who is unable to obtain it.

Now, it is the tracing of the operations of law that is attempted in this work, and the designation of the facts that are consistent with the operation of the law, and that are competent to disclose such operation.

This is all that the investigator of the affairs of nature can do, and it is all that ever was done by any author of science in order to

convince the world of the truth of his conclusions.

All the investigation of any subject can accomplish is to detect the consequences of an operation of law that is supposed to be taking place. It is all that is attempted in this work. It is all that will be done.

We will now commence the investigation of the evidence that an animal creation afforded the object from which a human creation was possible. The most competent character of evidence of this fact is found in the comparison of the different orders of men with some of the different species of animals, and in the construction of the embryo or fœtus of the human offspring, and in the continuation of the character of the animal in the character of the human being. We shall examine each of these kinds of evidence, and consider the method of transformation.

In the description of such methods, it will be competent to describe the cause of the difference in sexes in both the animal and human species.

When it is stated that the object evolved by an animal organization is the thing from which the human offspring is created, it is meant that a construction of the same character and form as the animal, except that it is without life or consciousness, is actually emanated from the coarser parts of the animal's body at its death, and that it is in existence after the death and decomposition of the animal, and that it is actually absorbed, or perhaps we should say imbibed, at the moment of the inception of pregnancy by the human mother, and by the influence she can exert on this object when in her person it is transformed into a human being. This unwelcome truth is one the whole human family has yet to learn, and when it is learned, the commencement of the better development of the human race will be realized. It is the fact that of all scientific truths it is of the most practical importance to the family, the community, and the nation. It will teach the whole race that in a destruction of all the worthless, vicious, deformed, and diseased animals within the contact of people will cause the offspring of a people to be intelligent, consistent, amiable, and without any of the curses that are seen in the shape of vicious, unintelligent, unhealthy, and worthless organizations, except such as are due to the perpetuation of the evils in the organizations of those who are in existence.

A broad and sweeping amelioration of the woes of humanity will be sure to follow the discovery that a miserable brute in our midst is likely to be given an existence in the shape of a miserable brute with human appearance.

The cause will be ascertained of the most wretched condition of society wherever it may be found. A cause can be found for the instances of human depravity where the depraved being was begotten by good and intelligent parents.

A cause can be found for the useless classes of people that are a curse to the community. A cause can be found for the inability of a people to advance in civilization. A cause can be found for the inability of savages to become civilized in their native countries. A cause can be found for the civilization of savages when they are removed from the forests and places of their origin.

The whole philosophy of the advancement of the human family can be discovered in the facts just stated. The philosophy of the cunning of the Indian, the incestuousness of the negro, the stupidity of the Chinaman, the degradation of the Italian, the brutality of the Spaniard, the amiability of the Australian, the intelligence and civilization of the Anglo-Saxon race, the quarrelsome character of the Irish, the degradation of the Arab, the vulture-like character of the Hindoo, the bear-like character of the Esquimaux, the animal qualities of the natives of the larger islands of the ocean, can be discovered in this important truth.

The cause of the complexion of every race of men can also be found in the fact. The cause of the existence of every race in the place of its origin can be found by the same fact.

The cause of the unwillingness of every race to depart from its native country is also disclosed in this operation of law. And, finally, the cause of all the characteristics, habits, and temperaments of the races of mankind is found in this conprehensive and unerring way of constructing human beings.

It may be said in addition that the cause of the assumption that man is but a monkey only better developed, is found in the fact that a human being is in every essential sense an animal of some species a trifle more developed.

Now, when these suggestions are considered by the reader, it will begin to dawn on his mind that after all we are but animals a little more advanced, and he will begin to see in every person that is in his presence that a whole figure of an animal is apparent, and that there is but an improvement in the animal in such person. He will begin to find the traits and habits of an animal of a character he is acquainted with in the traits and habits of the person. He will behold a dog's disposition in one, the disposition of a hog in another, the disposition of a horse in another, and a complete imitation of a bird in another, and in others all the animals of a domestic character will be seen.

This appreciation of the fact we are stating is the very result of the disclosure of the truth that is desired, and it is our intention to afford such an amount of the evidence of this truth that no person will in the future suppose that a mere invention of an hypothesis is intended.

In the following chapter the different races of the earth will be considered in the manner of their creation, and all the information of a character of evidence of this manner of their origin that is important will be given.

Chapter VIII.

In every separate race of men there is a variety of condensations of the thing called electricity, and it is the case also with every species of animals and plants. There is no difference in the construction of these three orders of organization, except in their forms and the extent of their unfoldment. Each organization, whether plant, animal or human, is but a consolidation of the influence that produces the entire operations of the body. Every organization in the universe is only a consolidation of the influence that is performing the construction of the universe.

The tiny cell of the plant, the equally wonderful cell of the animal or human body, the still stranger style of cell in the solar system, and which is a mere isolated organization, are all but mere condensations of the fluid that is constructing all the parts of the plant, or animal, or planetary body

Now, it is only the lining of the same cell that constitutes the emanation from the plant, animal, or human bodies, and it is only a clothing of such phantom cell that takes place in the embryonic unfoldment of the offspring of the animal or human organization.

No other work is performed in the development of the fœtus than the clothing of the cells of the emanation of the lower order of creation that is being transformed into a being of the next higher order; and the changing of the shape of the organs of that object.

In all cases of generation of organizations from the deposit of such a creation in the womb, there is a constant attraction of substance to the object of the same character that is operated in giving the insect a body capable of being seen, whether developed in the water or any filthy or decomposing substance.

A womb is but a mere bath room, where the decomposing follicles can be appropriated to the construction of a covering for a creation that is but a very transparent and invisible organization. The egg of the bird or reptile is but a womb of the same character, and in all such constructions there is in the course of their creation the construction of a mass of cells and corpuscles, the object of which is solely to afford the curious and unseen object in the egg, a substance that will clothe it in a manner to give it means to operate itself, and it does operate itself as soon as a current of electricity is imparted to it by the bird or reptile. In the womb of the animal or human organization the same character of cells and corpuscles is appropriated to the clothing of the unseen object in the organ, and these cells and corpuscles are prepared in sacks, and allowed to be presented in the womb as fast as the substance can be employed in the clothing of the embryo in it.

In these organizations there is a greater quantity of this substance required in order to construct the fœtus than there could be in the egg of such an organization if an egg was created.

It is a considerable organization that is prepared in the bird or reptile in the form of an egg, and it contains sufficient substance to develop an offspring of such an animal, but in a creation that is only able to develop an offspring by a slow and constant operation of the decomposing follicles, these produc-

tions must be constantly furnished, and in a way to afford a gradual unfoldment of the fœtus.

No more perfect arrangement of the affairs of nature can be seen anywhere, and it is one more of the astonishing examples of the wisdom of the Great Designer of all nature.

No author of science on earth is believing that a single particle of the egg or follicle is appropriated to the construction of the embryo of the animal or human offspring, and it is supposed to be only a mere growth of an entirely new creation in the womb or egg. Let us here state that in the unfoldment of the bird, or the animal, or the human offspring, there is only a mere repetition of the process that creates an insect in vinegar or in any filthy and warm substance in a state of decomposition, and let us add that, in every species of generation of life, there is only a spontaneous generation of this condition of existence.

Mr. Huxley and Mr. Tyndall, and men well informed in other departments of science are stoutly denying that there is, or ever was, such a thing as spontaneous generation of life.

We can state that there was never, and there will be never any other kind of production of life, and it is only necessary for the savants of science to understand that it is electricity that produces life, when they will see that there cannot be, and never was the begetting of species by the methods of copulation, as claimed by physiologists. No copulation is necessary in the case of a great portion of the animal kingdom.

They will also see that a mere current of this life giving influence will commence the unfoldment of life in the egg of the bird or in any egg, or follicle, and that in the constructions of a similar character in insects there is only a mere decomposition of part of them in order to inaugurate life in the other part, and it is these decomposing parts of such follicles in the smaller creatures that are denominated the male organs of generation, by these wise observers of nature. Where copulation is not permitted in the animal species or insects, the source of life is in every instance the mere influence generated by the decomposing follicles or cells of the parent. This method of producing life is employed in every species of animal, whose organization is so simple, that no greater degree of excitement is necessary to produce in the egg or the cell of generation a creation that can be converted into an animal like its possessor. And in every instance of the generation of life by the employment of the office of copulation of the male with the female, there is only a greater excitement of the female organ of procreation produced, and it is in every instance of this character a decomposition of follicles merely that is giving the male organization the means of accomplishing this excitement. Let it be distinctly understood, that in all the operations of this character, there is identically the same decomposition of follicles in the male organization that produces the excitement of the organs of reproduction in the female that takes place in the decomposing follicles of the insect of any of the lower animals that possess both the male and female organs in the same body.

It is solely the decomposition of such follicles or cells that produces the current of electricity that charges the great magnet in the female body, and renders it capable of attracting into it that creation that she is able to convert into a being like herself. How wonderful are the works of the Creator! The limited understanding of this wonderful operation of the affairs of creation, possessed by the members of the medical and scientific professions, enables them to believe that a mere insect, of the same character that is generated in any decomposing cells of the body can enter the womb of the female, and by some operation of a strange and unaccountable character become an animal like the mother, and possess all the qualifications for producing a continuation of the species. There is not a more stupid or ridiculous hypothesis concerning the operations of nature than this folly, and it shall not disgrace the profession of medicine after this article is read. The substance in which these insects are claimed to be generated for this purpose is only the broken down follicles and cells that are decomposed in the excitement of copulation, and which are thrown out of the system, only that they may not corrode and poison the body.

The disease called syphilis is produced by the retention of such decomposed substance by the female. The truth of this statement can be ascertained by inoculating the body of the mother with the substance. When this is

given demonstration by such a means a substance can be obtained that will be appropriate for vaccination for syphilis.

The animals that appear in this decomposing substance are merely the transformation of the cells of the follicles into small insects, as in every other case of the conversion of cells into animalculæ, and they cannot reproduce themselves nor exist but a few minutes.

No other work of creation will disclose to such an extent the fact that a mere current of electricity is all that is wanted to produce life wherever it is produced. These little creatures are furnished life by the decomposition of the follicles, and it is quite enough for their existence. The mother is allowed to obtain all the influence of these decomposing masses, and it is all that she does obtain from the male. The current is what is needed to agitate the battery in her body, and to render it a powerful magnet for the attraction of the object to be made a being like herself.

In this operation there is a performance as simple as the attraction of the piece of steel by the metal magnet, and it is in every sense the same kind of operation. This intense activity of the magnet that is calculated to contain an emanation from a lower order of organization is able to pull one of these creations into this organ, and this work is actually performed.

This is all there is of the office of procreation in the way of co-operation by the male sex. When it is seen why a soul of a lower organization is always utilized by the method of creating living beings, it can then be seen why a male co-operation is needed. Every female animal is able to give its companion knowledge of the period for the inauguration of a being like itself, and it is done by a greater affection of the female for the male. This influence called affection is only a manifestation of attraction in all respects, like that of the magnet. In such a period of affection for the other sex the female is only calling for co-operation in the work of obtaining a creation to be converted into a being of the same character as her species. This is generally effected, and if it were possible for the female to attract any other emanation than one from the kingdom below her, the whole system of advancement of creation would be destroyed, or made to defeat its purpose.

The reason why the animal will absorb only an emanation from a plant is because the plant is attracted to the animal, and the other creations of such a character are repelled.

It is because the animal itself is a product of a plant, that renders it capable of attracting the soul of a plant, and it is because the human organization is the product of an animal emanation, that the human mother can attract the animal emanation only.

Now, in these subtle operations of the attractive influence of the organs of the animal and human female, there is a chance to observe what will call our friends to us in a spirit world, and what will call us to the throne of the Creator.

Let no observer of this statement forget that in the mere attraction of his mother of the soul of some animal that was once in existence, the thing which constituted the observer's origin and character of being, was given to her person, and by her converted into such reader of this paper.

In no other possible operation of law could a being of any character be given existence, and it is identically the same method of begetting life, that takes place in the creation of any living creature, and the attraction of a creation of a plant or animal emanation to the womb of the animal or human mother is merely to place the object to be transformed in a bath tub of the same character, so far as its contents are concerned, as that in which the insect or worm, or any spontaneously generated organism is produced. When in this bath tub, all the process of unfolding is the same as that which takes place in the warm and stagnant water, or in the warm and filthy atmosphere, when insects are given existence. No change takes place in either instance of life begetting, that is not performed by a current of electricity furnished by the decomposing substance in the chamber or element of the developing creation, or by the water or atmosphere

This most astonishing performance of the conversion of a soul of a plant or an animal into a better creation, shall be completely described in this article, and when it is described, all that the reader of the paper will find it necessary to do, to ascertain whether it be true, will be to get a common work on physiology and look at the plates that represent the stages of the unfoldment of the em-

bryo of the animal and human offspring. No other work will be wanted to convince the reader that everything that will be stated in reference to this wonderful conversion of one order of creation into another is correct.

Now, before this part of the work of description of the origin of human races is commenced it will be appropriate to look for a moment at the evidence of the facts that a whole race of human beings was given an origin by the direct application of the Divine will upon the emanation of an animal organization, in both the male and female creation, and that in the origin of the different human races, there were as many different species of animal creations employed as there are different appearing races.

This surprising fact will be as clearly established as the fact of the conversion of such an emanation into a living being, and we ask that the whole scientific profession watch what will be the everlasting condemnation of the false and absurd doctrines of the scientists and the scholars, and the church concerning the origin of the human family.

So long has the human family been deluded in reference to its origin, and so stupid are the attempts at explanation of the problem, that it is but a mere walk of the more observing investigator to place all such nonsense under the feet of all who are now believing it.

Let it be understood at once, and thoroughly understood, that we mean by such remarks, that every hypothesis of the church and teachers of science, or teachers of any character, concerning the origin of the human family is without foundation, and is as absurd as it is groundless. Let it be understood that we mean to state that in the walk over of the annihilation of such doctrines, there is only nonsense and stupidity to be stepped on.

In the faces and organs of every race of men that the earth is possessed of, there is all the evidence any good observer of nature will require to enable him to discover what the origin of such race was. Upon the faces of each race there are the indelible stamps of the face of the creature that afforded the original parents existence, and they are so well exhibited that in no case or race of people can a mistake be made as to the character of the animal.

In the organs of the human body there is a still greater amount of evidence of the fact of an animal origin. In the habits and disposit ions of each race there is a copying of such attributes as existed in the animal that the race was created from. In every creature of the universe there is a copy of the object it was derived from, and in man, there is not only a copy, but a complete exhibition of the character of the creature that was the origin of his race. Now we can begin to compare the human races with their origin, and it will be a much shorter work than the comparison of animals with plants, as there is but a score of different races of men.

The comparison shall be made of each with the animal that afforded it origin. The comparison shall commence with the American Indian.

This miserable specimen of the human order of beings is able to become civilized when the race is placed out of the forest, and where it can be surrounded by what will give the offspring a mild and controlable disposition. In every Indian's face a panther's countenance is seen, and the features of the brute are the features of the Indian. The very flashes of the eyes of the panther are repeated in the eyes of the Indian, and in the whole character of the Indian the character of the beast is discovered

No one can fail to see the copying of the sly and cruel animal in all the methods and habits of the red man, if the character of the two creations be watched.

In the forest an Indian is at home, so is the panther. In a carousal of cruelty the Indian is delighted, so is the panther. In the prowling of the Indian at night upon a foe there is a copying of the panther's habit of prowling upon an object of prey. In the trait of the Indian of scalping its human victim, there is a repetition of the trait of the panther, in carrying away a sip of the blood of its victims, in a crusade of destruction of this cruel creature, as it passes through a forest. From every fresh victim there is but a sip of the blood, from the throat that is cut, that the beast takes.

In the habit of the Indian of adorning himself with the tails and claws and faces of the animal, there is only a partial exhibition of the animal nature of this being, and it is but a feeling of the want of what once constituted the organization that induces this cruel

person to adorn himself with the covering of a wild beast.

In all the conduct of an Indian there is a greater or less caricaturing of the panther, and it is only when a panther is seen in the carriages of the menageries or in a forest that one can get a glimpse of the countenance of an Indian unless the Indian is seen.

In all the contrivances for overcoming an enemy adopted by the savage, there is nothing more ingenious than what is adopted by a panther in its cunning in destroying an object of prey, or an enemy. It is only a mere secreting of itself from the intended victim, until an assault is made in a sudden and irresistible manner.

No one is able to understand why an Indian cannot be civilized, and why they are so prone to be in a forest. The reason for such a character is found when we discern his origion.

The only portion of his race that is civilized, is that part of it, that has been separated from the forest and the wild beasts in it, long enough to allow a generation of the race to be begotten and grown in the midst of an animal species of a domestic character. This important truth is observed in the condition of the Indians in the parts of the country where they are civilized and carrying on civilized works. The faces and habits of the children of these people are plainly a modification of the faces of the original race. It is just as possible to convert the whole Indian population into civilized beings, as a part of it. It can be done merely by removing the whole of them from the association of ferocious brutes, and from the confines of the forest.

Now, a whole chapter of the evidence of a conversion of an animal phantom into a human being can be read in the face of the negro. This order of men is so well supplied with the copies of the features and aspects of the creature that gave the order existence that they can be all seen at a distance as great as the negro can be observed. The gorilla is pictured in the negro in every feature of the man and in his color and habits and incestuous nature. Is this not a fact? Let us see if a negro is anything but a gorilla, a little modified in its worst aspect. Both creatures are black and both have a flat nose, a pair of thick lips and a great strong under jaw, and an eye as much like the eye of a baboon as an eye can be. Where can a negro be found as a native of any country, except where the gorilla is found? Where can a gorilla be found except in Africa?

Where is there a creature that is like a negro in its appearance and features except this ugly and incestuous creature that is content in the swamp where the sun does not shine, and where it is only fit for such a creature to exist? So monstrous a creation was limited in its propagation, for it was too hideous to be given a wide and numerous existence. When this animal is caused to exhibit its disposition by being tormented, the same conduct will be seen in the creature that is seen in an infuriated negro. A negro will always use a club or some thing by which it can strike against an adversary. The use of weapons of any other description by a negro is only a result of considerable practice.

Now, we can point out the origin of a Chinaman, and it is a mere crocodile. In the features of the Chinaman there are seen the features of this beast, so far as a human organization can produce them. The inclined and sleepy eyes of the Chinaman, are only those of the crocodile in a half human form of head. The nose of this being is only a mere contracted nose of the brute, and his nostrils only a little more inclined than those of the crocodile. His mouth and jaws are but the result of a contraction of the jaws and mouth of the animal. The disposition of the Chinaman is the same as that of the reptile; and he is as ferocious when angered.

The habits of the two creatures are as much alike as any two orders of creatures can be. The Chinese dwell on rafts and boats in multitudes by the shores and in the rivers of China, and when they are hungry they will go on shore for the food they need. Crocodiles lie on logs and the banks of streams and when they are hungry they plunge into the water and prowl about for their food.

In every considerable building in the Chinese empire there can be seen a crocodile constructed of wood and other material and stood on its tail.

In each of the boats of any size on the coast or in the rivers of the empire there is another construction of a crocodile form, and on some of them there are even copies of the scales of this reptile attached to the sides of the boats as ornaments, or as articles of use.

In the Chinese works of arts this creature

is often portrayed. A considerable degree of civilization is impossible with this race of men, and it is owing to the degraded character of their origin. They are incapable of advancing any further in the way of civilization. Their want of development is the cause of their superstitions, and their want of sufficient food is the cause of the decomposition of their bodies—called leprosy.

Now, let us examine another race of men, and ascertain what its origin was.

The old nation of Hindostan is the one we will consider. There is a great resemblance of these beings to the creature that allowed them an origin, and a similarity of habits between the two creatures can also be seen. A Hindoo is a product of the conversion of a vulture into a human form. This species of the human family is given a foot and hand as well calculated to scratch what the being desires to scratch as the foot of the vulture is calculated for its uses. They are slim and small. The eyes and nose of the Hindoos are copies, to a great extent, of the eyes and beak of the vulture, and they are as appropriately made to watch and smell the good things around them. The color of the Hindoo is as dark as that of the vulture.

He is crowned by a turban that would crown the vulture as it is crowned if the turban was not larger than that of the condor. This covering of his head is suggested by the existence of a similar covering on the back-head of his origin.

When a Hindoo is coursing the country on foot or on horseback, in order to discover the objects of plunder on the plains or at the base of the mountain or hill, the conduct of the vulture, as it soars over a country or lights on a mountain crag to discover the objects of its greed, is seen, and the Hindoo and vulture both avail themselves .of the eminences of the country, from which to descend on the victim below. Where is there a creature that is like the Hindoo in either habits or features? Where is there a creature that is so much like the vulture?

In every feature of the Esquimaux there is a portrayal of the features of the polar bear, and in the habits of this race of men there are none that are not obtained from this brute. Beyond a little calculation and skill in preparing their huts and implements for killing fish and walruses, they have no development of faculties different from those of the bear.

The food of the two creatures is the same, and the habits of both are alike, and in respect to thefts, there is a complete counterpart to the bear in the human bear. The race is confined to the same latitude as the bear, and it would perish about as quickly if compelled to exist in a warmer latitude. Now, a glance at the old Caucasians of both Europe and Asia. There is no evidence whatever that this race of people is the one from which the European and English nations descended. This claim is all a fiction, and the best authors on such subjects as national character admit this. The Caucasian is an Arab given a better complexion and more civilization by a more salubrious and equable atmosphere.

Both the Caucasian and Tartar are but more active and intelligent parts of the race that obtained its origin in the body of a goat. The Caucasian will furnish the same condition of hair as the goat possessed, and it is grown considerably longer on those people, on account of their having a locality of existence of the same nature as the goat.

These docile and splendid organizations are the descendants of the race of people that built the cities of old Persia and Palestine, and the Nile. They were so numerous that they were compelled to emigrate to all parts of the world adjoining their native country.

Every country of the continents of Asia and Africa, that was not populated by the Chinese and Hindoos and negroes, was populated by this race, and they are the oldest race of the earth, except the Chinese and Hindoos. In these more pleasant and amiable countenances there is a chance to discover why a world is to-day worshipping a book and a record of a few characters of the old countries of the Indus and Euphrates, and those bordering on the Mediterranean.

The Caucasians were a constantly progressing people, and the evidence of this progress is seen in the more advanced character of the teachings of the Bible, as the record is compiled. In all the teachings of this work a mere description of the condition and progress of the Caucasian race in such parts of the world, at the time of the writing, is seen.

No country is able to disclose a more enterprising nation, and a greater amount of intellectual labor has been performed by this race of men than by all the rest of the human family.

When this whole work is understood, if ever it is, the race will be given credit for all the civilization of Asia and Europe, except what was possessed by the Indians and Chinese. A more graceful and generous nature cannot be found in the world than in the pure Caucasian, and it is only a degradation of the race that is seen in ths Arab.

A Caucasian female is as beautiful a creature as the earth possesses, and a more devoted object to her husband and offspring is not in existence.

These people are destined to come again into the family of nations as a most influential part of the human family. The entire character of the civilization of the eastern world is to be changed by their influence and work.

No people can give a more elegant description of the means of the Creator for accomplishing a conversion of an animal into a human being, for there is a most wonderful caricaturing of the goat in these splendid people.

All of the goats of that country are given a white covering of hair, and it is only when they are transported to the other countries of the earth that they are able to acquire a covering of any other color. Observe the hair of a Caucasian and a cashmere or angora goat. These goats are only a converted plant of the species called evergreens, and their great amount of hair is but a different exhibition of the points of this plant. A generous and docile creature is the animal, and it never desires any other associates than its offspring and one goat of the opposite sex.

It is a very well calculated construction for climbing the mountains and rocks, and it likes to live on the sides of mountains and in the bushes, as well as the Caucasian family.

Its face is as long and its nose as sharp as the Caucasians', and its whiskers are of the same pattern.

No goat is satisfied on a damp and low place, and it will always migrate to the higher places.

This habit was followed by the Caucasian when the opportunity occurred for him to get back to a higher locality.

Now, this is all we can state of the correspondence of races of men with animals in this chapter, but it shall be concluded in the following chapter.

In another chapter, after this work is concluded, we can close the discussion of the origin of species. It shall be closed without a supplement, in which the objections to the argument are greater than the reasons advanced in support of our position.

Chapter IX.

We were compelled to drop the comparison of the human races with animal species in our last chapter in the middle of the work. Let us now continue the disclosure of the relation of such orders to each other.

The Irish are noted for a quick perception of a wrong and a quick inception of a determination to avenge the wrong. It is a characteristic of this people to constantly agitate a grievance, whether real or fancied. In the natives of the Evergreen Island there are all the means for ascertaining why these people are so dog-like in disposition and spirit. Their faces are almost exact copies of the face of the bull-dog, and in almost the entire nation the stubborn and sullen, and in a great measure the stupid, spirit of this animal is exhibited. The motions of the uncultivated Irish are as much like this shuffling animal as the movements of a human organization can be.

No people are so determined in their resistance to what they feel is wrong, and no people will so constantly and stupidly agitate the supposed grievance. When a chance is given them to overcome a foe there is likely to be a massacre as well as victory. The bull-dog is never satisfied until its antagonist is dead. This old and quarrelsome race is as incapacitated to govern themselves as the animal from which they obtained their origin. They are constantly repeating the habits of the brute in all their style of getting a living in their own country except in the more cultivated communities. The male is a loiterer, and prone to fight and carouse and drink, while the female is toiling to get a bit of bread and meat, and, at the same time, she is nursing her children.

She is a great and constant worker, and if she could be associated with a workman of equal industry and enterprise, the whole nation would become a very advanced people. Whenever this woman is given a worthy mate, a most talented and enterprising off-

spring will be seen. It is the marriage of Irish women to men of other nations that gives the Irish character so much power and influence in other parts of the world. No other work is needed to render the Irish a contented and industrious nation in their own country than a partial eradication of their bull-dog character.

Now, a glance at the Anglo-Saxon race, of which the principal civilized nations are composed—the most intellectual and the most developed of human races. From what was it created? or from what did it obtain so much intelligence and capacity for advancement? It must have been a creature of remarkable intelligence and one capable of great discernment and learning. This creature was the very animal that to-day is following in the footsteps of this race and caressing the hands and faces of the beings that are but a step more advanced. It was a dog of nobler character than the species that afforded the Irish their origin, and a dog that was actually the protection of this race against the savage beasts of the forest, when the race was so ignorant and helpless that it could not protect itself or perpetuate its existence without a protector of this character. The sleeping child, as it is watched over by a faithful guardian of this species of animals, presents a picture of considerable resemblance to the infant race that was defended by the progenitors of this animal. The fact that a human being was a creation from the canine species of animals is the cause that in all parts of Europe renders certain species of dogs so excessively fond of man. Dogs of a different variety from those of the European varieties have as little attachment for the human family as the fox or bear. It is a mistake to assume that the dog is universally a friend of man. It is so only where the breed is one of the same character, in part or wholly, of the species that furnished this human race origin. Everywhere on earth the dog is as much the enemy of man as any other animal, if the species of dog is one that is in no way related to the species that was the means of the existence of a human race.

The wolf, fox, jackal, prairie dog, the dogs of Australia and Asia, and all canine species in no way related to the species that were the origin of the human races, are all the enemies of man. They are called wild dogs, and are slaughtered as other dangerous and ferocious animals are. Now a dog is all the while caricatured in this most advanced race of men, and the imitations of this animal are as numerous as the habits of the people. All the more admirable qualities of the dog are found in the Anglo-Saxon. The attachment for the dog in this people is nearly as great as that of the dog for man. The more intellectual character of the dog is seen in a greater degree of intellect in this race than is possessed by any other race.

A fellowship of the nations composed of the race is a characteristic of the fellowship the dogs of one class possess for each other.

Now, in a genuine specimen of the Anglo-Saxon race, a full presentation of the features of the mastiff is given. There are a million men and women in the countries of Europe and America, whose whole aspects of countenance and features are grand copies of this brave and noble dog's countenance and face. A magnanimity is always displayed by this animal as great as can be found in a human being, and it is his magnanimity that rendered the Anglo-Saxon capable of promoting a civilization of the character seen in Europe and America, and rendered all the nations of this derivation something more than robbers and pirates.

On the brow of every grand specimen of the German and American, or Englishman, there can be seen a generous old mastiff's courage and character. Look at the leading men of these nations, and see if there are not features of this grand animal's face in the faces of such men. Look at the guiding man of the politics of Europe, whose great head is only wanting a mastiff's pair of ears to render it a mastiff's head.

Look at the most capable generals of Europe, or England, or America, and observe the forehead and countenance of this animal. It was a giant mind that demolished the old and rotten feudal institutions and monarchies of Europe, and it was a mastiff in human form that did this work.

Wherever a great man of this race of people is seen there is a certain production of the features of this animal.

This race is the only race of men on the earth that is capable of unlimited advancement, and the only race that is destined to civilize the earth.

No other people are capable of conquering

the world, and it is stamped on the faces of the race that a world is to be subdued by them.

This is all we care, in this place, to state in reference to the origin of the Anglo-Saxon, but the characters of the different societies of such people will be discussed in a future chapter, and the causes of the difference in their conduct and habits pointed out. This part of the discussion will be appropriate in connection with the discussion of the unfoldment of the offspring of the human mother.

In another chapter all the causes of the differences in the great races of the earth will be further considered.

Now, on every island of the globe, that was made capable of supporting human life, a race of the human character was created.

There was not an exception to this arrangement, and it was as consistent to develop a human race on the island that could support such creations, as the generation of parasites on a person's head.

The omission to develop a human race on an island capable of sustaining one, would have been an anomaly in nature, and utterly irreconcilable with the orders of creation.

We are, however, under no necessity to accept this kind of evidence of the creation of separate races for such islands, for, except in one instance, such races are there to speak for themselves, and in their construction the fact is spoken. Every great island except those of the West Indies is inhabited by a race peculiar to the island, and found only on that island.

It is a mere subterfuge to claim that a mere resemblance of phrases of a language to those of a distant language is evidence that the two races are the same.

It is impossible to create two different languages that would not have resembling parts to some extent.

The language of the aborigines of this country has phrases and words corresponding in some particulars to the speech of the ancient Egyptians, and all languages can be found to possess some words of a character similar to those of the most ancient languages.

It is the same case with respect to music, a great many songs cannot be composed without some of their measures or bars corresponding to the same parts of other songs. No author of history is willing to attach any great significance to such facts, as a species of evidence of a similar origin of two people. An overthrow of this claim, that mankind had a common origin, is found in the immovable fact that the original features of a race are never eradicated, and there is no race of people on earth whose existence has been long enough to obliterate, through any agencies, the original characters of the faces of its people.

It is utterly impossible to extinguish these original impressions, and it has never been done. The absorption of another character of features by a union of races is only a mere division of the features between the two, and no alteration of the features or color takes place. When a person is given a black skin, it is never to be white, and it never will become white. When given a flat nose it must be worn forever, and it is worn forever. This is a perfect answer to the argument that all human races had a common origin. All the people of an island who were descendants of the natives can be discerned wherever they may be, and it is possible to distinguish them under all circumstances.

No one of the creations of the Almighty is obliterated, and none of them ever will be. It is a law of creation to continue an example of every creature until its use is no longer possible, and when this is considered a whole catalogue of disclosures of this law of creation will follow. It is not in order in this connection to advert to the philosophy further, but it shall be again considered in another chapter. No order of work of the Author of Nature is allowed to become unrepresented in the universe, and the archives of such chronologies are capable of furnishing unerring exemplifications. In all the corners of the universe there is an arch of the inscriptions of a common Creator, and on its portals are emblazoned the wonders of His works. No faulty scepter is pointing to the figures of these catalogues, and the way is prepared for man to behold them all.

Now a few more references to the creation of human races and our work of comparison of man with the animal shall cease. On the great island of Australia a race of people was created whose organizations were in all respects like the animal from which their existence was derived, except that a small amount of modification of some of the animals' organs exists. The arms and legs of the

race are of about the same proportions of length, and their faces are invariably copies of the animal's face. They are as docile and harmless, and as incapable of accomplishing anything that requires talent or energy. The animal we refer to is the kangaroo, and all who can get a picture of both the kangaroo and native Australian are asked to do so, that the resemblance of the two creations may be seen In nearly all the children of the European and other foreigners settled in that country, faces like the kangaroo can be observed, and the diposition of the animal is also possessed by them to a great extent. When a discussion of the transformation of the animal emanation into a human form is reached this fact will be noticed again.

The reason why an Australian is so indolent and wanting in all the capacities for civilization is discovered when his origin is observed. The kangaroo is only able to eat and sleep, and it is without means of self-defence calculated for such a purpose. It is actually without full ordinary fore paws as possessed by other animals. Those it has are but little better than good-for-nothing appendages that seem only to keep the creature's head from the ground while it eats. When a little domesticated the creature will come around a habitation and bring its whole family and relations, and sleep on the door-step or in the garden, and beg a dinner or supper, and do all that its representative the Australian can do. Its color is but little different from its human copier, and its long and stupid-looking nose and jaws are barely changed in the long nose, face and jaws of the Australian.

It is impossible to discover another creature that is so much like an Australian, and it is impossible to find a human race so much like kangaroos as the Australians are. It is an unmistakable fact that an Australian is a mere production from a kangaroo.

Now we will examine a race that is only a few leagues from this continent, and although but a short distance from the Australian people, it is a widely different race. There is so little difference between a New Zealander and a Chimpanzee that a mistake might be made in determining which was the human species if the human beings were not much larger than these brutes. Let the reader obtain a picture of the two creations and observe the resemblance. Now this is all that need be said in reference to the origin of the New Zealander, except that the Chimpanzee was destroyed in New Zealand before any foreign nation discovered the island. What could render two races so widely different in intelligence and appearance at the same point of the earth if they had not a different origin? What could create a remarkable intelligence in a New Zealander and deprive an Australian of it? All that a whole class of scientists can do toward discovering the cause of such differences, is to state that when a people are given a character by their surroundings and allowed to remain undisturbed, it will either increase in respect to intelligence or decrease, and that in case of the Australian it decreased, and in respect to the New Zealander it increased. No cause for the decrease or increase is given. And this argument is as substantiated as any part of the work, called the "Origin of Species," by Mr. Darwin.

Let us see if a cause cannot be found for the character possessed by the Sandwich Islanders, who are different from any race yet examined:

These people are as much like their origin as the other races are like theirs. A mere native hog is represented by this curious race, and the human subjects of life are as indolent and selfish and dirty and sensual as the creature that constituted their origin. When they were taught to read and write and designate figures, there was as useless a performance of teaching, as can be seen in the instruction given a hog to spell a name by picking out the appropriate letters of the alphabet—a performance frequently seen at trifling shows. In this race of people only mere brutes in instinct and habits are seen, and they are utterly without capacity to advance in the way of civilization. Their dirty habits are all the habits of swine, and the people actually delight to get into a puddle and frolic as swine do. Their sensuality is as great as that of such brutes, and it is the cause of their diseased and deteriorating condition.

There are about three different races of people in the western continent we have not mentioned, and there was a race that once occupied the great island of San Domingo, and there is a relic of a race in Borneo that was indigenous to the island, and another partly matured race in the great island of Madagascar.

Of these different races there are only a few remarks necessary concerning their origin. In the island of San Domingo, only a guinea-pig and cayman were on the island from which a human being could be derived. There were no larger animals there. The old idea of the Spaniard is that the aborigines were degenerated Indians. They were small in stature, docile and weak in mind and body, and for such a condition they were indebted to the cayman or the guinea-pig, and it is impossible to ascertain which, as the description of the people cannot now be obtained.

They were so weak and degraded that they were nearly all destroyed in a century, through the oppressions and cruelties of the Spanish invaders. What could have made these aborigines of the island so very puny and without intellect if it was not the fact that no animal existed on the island greater than a cayman or Guinea pig? What deprived the island of greater animals if it was not the fact that its plants were small and of a character to furnish nothing but a creature like the Guinea pig and cayman and the other small creatures of the island?

In the aborigines, of Borneo, there was but a product of the vulture, as in the case of the natives of India. These people resemble the people of the Malay peninsula, but they are larger. They are the same kind of people more developed and a little more intelligent.

There is no animal but the vulture on the island from which a human being could be created, unless it be a crocodile or rhinoceros. Other animals are there, but they consist of snakes, birds, and a great variety of small animals.

In the other islands of the East Indies there is a part of this race. All others are foreigners.

The island of Madagascar is occupied by a people who are in a great measure the advanced descendants of a race that was indigenous to that island. They are unlike any other people, and are quite intelligent and progressive. Their customs and characters and complexions indicate the creature from which they obtained an existence, and they are more than seen in such a being. They are exemplified in the civilization obtained by these people.

The creature was a great ape, and it is only an ape in the human form that is observed in this people, where the foreign blood is not too predominating.

Now a glance at the three races of the western continent that we have not mentioned—Indians of the Andes, Cordilleras and Rocky Mountains.

From the lower part of the Rocky Mountain range to the lower part of the Andes there were more or less advanced races of people before any foreign people ever beheld the shores of the American continent. It was as much an independent existence of races of people on the slopes of these great mountains as the existence of the Chinese or Africans.

The authors of the works of science or history have not yet discovered that it only required a piece of land large enough to have created on its surface a high range of mountains in order to give a human race a chance for existence. On every body of land on the globe that contains a considerable range of mountains a separate race of human beings once existed, and does exist to-day where they have not been exterminated by an invader. In the East and West Indies the islands are but a great range of mountains separated by narrow straits. They are only chains of upheavals, with considerable plains at the bases of the mountains

On the slopes of the Himalayas are found the Chinese and Hindoos. On the Caucasian slopes the Caucasians had their origin. On the slopes of the Alps the Anglo-Saxon, or, what is more correct, the aborigines of Europe, had their origin. They were the stone men whose remains are found in the caverns of the country. On the slopes of the Grampian range the original Scotch and Irish came into existence. On the slopes of the mountains of Madagascar, the native or aborigines of the island. On the slopes of the mountains of the island of Borneo, the natives of that country. On the mountain sides of the island of San Domingo, the aborigines that were so cruelly destroyed by the Spaniards. And on the slopes of the mountains of the Sandwich Islands, and Australia, and Mexico, and North and South America, human beings were created, and each of these beginnings of continents overlooked the beginning of one or more races.

It is a surprising fact that, with the exception of the Esquimaux and Irish, all of these races had their origin within forty-five degrees of the equator.

All the original races are, as far as they are known, located by the writers on the subject at the bases of the great mountain ranges of the continents, and without note of the fact that only at such places can what appears to be a separate race be found.

The old nation on the slopes of the Andes was a derivation from the same kind of creature that the North American Indian was created from, and the greater size of the animal and its immense strength was exhibited again in the size and power of these people.

They could operate on the mountain's side, on its top, or in the plain, and climb the most rugged of the Andes, create paths on their sides and over them, and, in fact, they placed the whole surface of the country under cultivation for a greater portion of the distance between Cape Horn and the Isthmus of Panama. They were as red as our Indians, and as much like them as the character of their origin would permit. They differed principally in their intelligence.

No great degree of civilization was reached by them, and it is a fact that no civilization was acquired by the race until it became so numerous as to compel a migration to the plains, where only a vast number of cattle and inoffensive animals were existing, and it was by a contact with these more docile and domestic creatures that enabled the native to become civilized, and, when the portion of the race that had become civilized became numerous and powerful, they were able to overcome the savage portion, and did, and it was the partly-civilized portion of the race taking possession of the country occupied by the savages, and subjugating the uncivilized people, that constituted the commencement of that reign of autocrats called Incas. They were only part of the same race more civilized, and their understanding of the fact that it was only a part of their own race that was not civilized was what caused them to treat this portion with kindness and improve their condition.

It is unknown to the authors of history what the origin of the people, of whom the Incas were leaders, was, or what the source of the Indians of South America. It is only by a study of the origin of all races that these inquiries can be answered.

On the mountains a mere handful of these people can be found now.

They are partly civilized, and possess a considerable degree of humanity.

On the slopes of the mountains, and on the plains and coast a foreign race or races are to be seen now.

Now, we will close all that we care to state in comparing the human with the animal order of creatures by a short consideration of the people that occupied the plains and mountain slopes of Mexico and the lower portion of the Rocky Mountains, and the people who are now found as savages in Central America.

On the high table lands of Mexico there existed a docile and considerably cultivated race of people, and a relic of the race is observed in the degraded Spaniard of that country.

This gentle and industrious people could be favorably compared with the Caucasian, and the same kind of creature afforded them origin. The goat was only a darker and less beautiful creature in this country.

These people were contented only on elevated places, and in a pure and bracing atmosphere. They were affectionate, and so disinclined to combat that a mere handful of adventurers captured the entire country, and made their ruler a prisoner. Every sacrifice of life with them was for a religious purpose.

If the world was entirely occupied by such creatures as the aborigines of this country it would prevent any great degree of civiliztion being obtained.

In the point of country constituting what is known as Central America there is a much later creation of a human race, and the race is in a period of infancy, and yet it is now in a degenerating condition. These people are nearly as black as the negro, and are as brutal as the Indian of North America. They are as degraded as the Australian, and as indolent as the Sandwich Islanders. No other race is of the same character or disposition, and no race appears like them. In all their conduct only a mimicking of the animal from which they were derived is seen, and that animal is the shy creature that gave an origin to all the original population of South America, the jaguar.

In their distance from the country of the Peruvian, and in their more active and degraded character, there is evidence of their being a later creation than the Peruvian race.

They are darker, and more like the negro in color, and in the character of their organizations.

The people of the country who have crossed the Isthmus of Darien will admit that this description of the appearance and conduct of these natives is correct. A mere race of savages was created on the Rocky Mountain slopes and of the same character as our Indians. It was their admixture with the Aztecs that changed the character of the more gentle and Southern race.

This closes our comparison of man with the order of creation below him, and it is quite as much of a work of that character as is necessary or proper in this article.

It is our hope that all who see what is stated will examine the statements this work contains, and finish the comparisons themselves.

It will be a very interesting and important labor in the direction of scientific inquiry, and it will repay the time and labor devoted to it.

In the next chapter we can close the discussion of the origin of species. The work will be nearly the same in volume as the discussion of the question by Mr. Darwin, except the appendix of that work. A supplement will not be necessary to our article.

In the next chapter a discussion of the actual operation of the conversion of a phantom or emanation from a plant or animal into a being of a higher organization will be given, and the umistakable evidence of the origin of the animal and human creations, will be discovered in what is hereafter to be stated, as well as in what is already stated.

Chapter XI.

When the preceding chapter was concluded, it was stated that in another chapter we could close the discussion of the origin of species. It is very important that the entire philosophy of what is termed embryonic development should be disclosed, and the work is so considerable that a longer chapter than the preceding is unavoidable.

In an examination of the operations by which a plant in animal volution is converted into a being of a higher condition of development and rendered a living creature, the amount of evidence necessary to establish the truth of the hypothesis of a plant or animal evolution being the origin of each animal or human species can be found, even if there were no other evidence of this great and important truth.

The very operation, if understood, will disclose only such a transformation of one of these creations, and it can be observed that it is only one of such creations that is converted into a being of a higher order of organization and life.

It will be possible to ascertain with absolute certainty that one of the creations developed by a plant or animal organization is operated on in the womb or egg.

No other object will be found to be operated on, and it will be plainly seen that no other object could be operated on in the womb or egg to create an animal or human fœtus.

Before commencing a description of this most subtle and wonderful work, let us call the attention of the reader to the very nature of the object which is to be given an untoldment that renders it a greater organization.

A phantom creation of a plant or animal organization that is developed in the growth of one of these objects is nothing more nor less than a counterpart to the portion of the organization that decays when the soul or phantom is out of it. Every portion of the plant or animal is given a perfect copy of itself in the creation that is eliminated at the death of the organization. These copies are in all respects the same kinds of objects as those they are evolved from, except that they are more refined and without the means of greater development. They are without life, for the reason that they possess no current of the agent of all life. The animal soul is without consciousness, for the reason that it is without life. In these deprivations of what constitutes either life or consciousness, there is all the reason why these emanations are not qualified to accompany the human soul through the unlimited course of the soul's existence. The absolute necessity for the employment of these etheral creations in the development of the higher creations is a reason for the absence of life and immortal capacities of those orders of what may be termed spiritual creations. Equally consistent with the purposes of these creations is the fact that in such creations as plants and such beings as animals, there is no contemplation of a future existence, and no capac-

ity for appreciation or enjoyment of a spiritual realm.

In the existence of all such wonderful constructions there is only a purpose to give the world a more advanced order of organizations.

And as certain as they are in existence, there is a purpose for their existence; and as certain as there is a purpose for their existence, there is a use made of every one of them. No greater number of plants is allowed a creation than is requisite for the creation of what orders of animals are ordained. No greater variety or number of animals is allowed an existence than is necessary for the creation of what is to occupy the earth in a greater degree of development and to furnish the air with a breath of life, and it is as impossible to destroy one of these wonderful evolutions from the plant or animal as it is to destroy a world.

Every animal soul is given a different character of existence, either by a creation of human beings from such objects, or by a creation of a thing of which the world is as ignorant as it is of the works of an unseen world. The employment of the insect and all the more degraded creatures in which the earth abounds, when they are only mere phantom creations, is merely to give a substance to the atmosphere which can be converted into what our scientific authors call molecular motion. It is only a mere augmentation of the magnetic currents of the atmosphere. The augmenting current is obtained by the decomposition of these creations.

Without their decomposition our atmosphere would not possess sufficient magnetic current in the winter to afford us the breath of life. By breath of life we mean the veritible Holy Ghost, to sin against which is said to deprive us of the blessing of a future life of happiness.

This Holy Ghost is all the while coming into our bodies, and the nostrils were created and kept open for this purpose. Now this filling of the atmosphere, with what the earth is unable to throw out in the winter, is a beautiful provision of the Creator to prevent us sinning against the Holy Ghost, and it actually saves all mankind from the commission of this wickedness.

It is a fact that the wind is caused to blow with violence wherever the ground is closed with cold for a considerable season, and it is also a fact that these winds are employed for a purpose, as well as any other operation of nature. Their purpose is solely to decompose these useless phantoms, and the decomposition is effected by the velocity of the current of electricity that produces the winds. A current of electricity will decompose any substance, if it is given a sufficient velocity of motion in coming in contact with the substance. Every one who is living in a cold country will acknowledge that in a north wind there is an abundance of something that makes them feel as strong and active as they ever do when they are exercising in summer. Every person who steps from a warm room into a winter atmosphere will realize the presence of considerable electricity in the air, for until the cold begins to sting the cheek and ear, the atmosphere will seem quite light and warm.

Now a greater revelation than this is to be disclosed in connection with a north wind. A current of the earth's electricity is coursing from the North Pole to that part of the earth that is giving out a current. It is merely a return of the current that is sweeping from the open portions of the earth to the North Pole in an arc character of direction. In the variations of this great circuit of the current of the earth that escapes from the equatorial or warmer portions of the earth and passes to the North Pole, there is all the cause of the change of winds from a southerly to a northerly direction. Only from the equator does the earth's current pass toward the North Pole. Below the equator the current passes to the South Pole, and over the whole breadth of the earth that is open, and giving growth to plants, does the current of the earth escape.

The fluctuation of the magnet at the equator, or what is the actual equator, is produced simply by the more vertical movement of the earth's current. The fluctuations at all other points of the earth, except the dipping of the needle, are produced by the character of the earth's continents and oceans. A swaying of the current is sure to produce a swaying of the magnetic needle.

No author on the globe or investigator of nature is able to ascertain what causes the needle of the compass to point north and south, and it is entirely unknown that it would point from a fulcrum or pivot only toward the pole, if it was attached to the

pivot by one end in a manner to support the other end at the same elevation. The phenomenon is exactly the same as the operation of a current of water in carrying a stick of wood along the current of the stream, and the stick will point toward the north pole of the stream. What a monstrous problem it was to discover why a stick of steel will point toward the north pole of the globe when poised in a current of electricity! The dipping is only a raising of one end by the ascending current. No operation of the magnetic needle will do less or more than confirm this statement. The reason why the wind is caused to come over the surface of the earth from the north in winter is because the whole of the earth is closed from the pole nearly to the 30th degree of latitude on the eastern shores of continents, and to about the 40th degree on the western shores, in this season, and a portion of the current discharged around the earth, below this belt, is attracted back toward the equator. The current is so extensive in this season from the equatorial portions of the earth to the pole, that a portion of the current is called back before it reaches the pole.

All that is here stated concerning the earth's magnetic current is only a result of the necessity of giving an explanation of the decomposition of those objects in the atmosphere that are produced from the animal world. The whole philosophy of the great operations of the earth's electricity is to be given when we discuss the questions of geology.

In an article devoted to such inquiries, a complete discussion of the work of converting a world that was once of a character similar to the creation that is evolved from the animal or plant into what is now observed, will be given, and a most interesting unfoldment of the great condensation of the electricity of a universe into a ball of transparent substance will be found to have taken place.

A mere change of the substance of the original organization of our planet was all that gave existence to the different objects on the earth's surface and on the crust of the globe. A complete description of all the changes that have taken place, and the causes of such changes is possible, and it shall be afforded our readers.

It is now in order to discuss the process of the transformation of a plant or animal emanation into a better creation.

In all the constructions of such a character, there is a capacity for condensation and in the reception of one of these wonderful creations by a womb or an egg, there is a condensation of the object, or what can be better denominated, a contraction of the thing. A similar contraction of atoms can be observed in the congregation of metal filings or other atoms which are drawn to the surface of a common magnet.

When the attraction of a creation of the character of a plant or animal evolution takes place, only a contraction of the object is performed, and it is drawn into the organ of the animal or human mother intended for its unfoldment, precisely as the bladder absorbs the waste ashes and fluids of the body.

This organ of the abdominal cavity is in all respects an arrangement similar to the womb, and it is shaped very much like the womb. It is relieved of its contents in precisely the same way.

The contents of the bladder are water, ashes and alkali, and a few drops of decomposed alkali called ammonia, and a small amount of what is better termed the acid of the system.

Every particle of these substances is absorbed by the bladder, merely through the attraction produced by the vacancy of the interior of the bladder, a mere suction. The atoms of these substances are so small that they actually pass into the bladder through the pores of the organ. When they are expelled from the organ they are merely given an opening by the expanding influence of the electricity, that is generated by a partial decomposition of these substances while in the bladder, and the common operation of the old style of syringe is performed by the bladder, in the shrinking of the walls, and the operation is assisted a small amount by the syphonic operation of the escaping substance.

In the discharge of the contents of the womb a similar operation to some extent takes place, and the additional philosophy consists of the pressing influence of gases generated in this organ. The bladder is never given a volume of gas, but the womb is.

The decomposing follicles of the ovaries, when not employed in the clothing of a fœtus, are producing in the womb a considerable

amount of both gaseo and electricity. A gas is merely an approach to the construction of electricity. Only a little more decomposition is necessary to convert a gas into electricity. When the female is without an object to be converted into a creature like herself, these decomposing follicles are only employed to cleanse the body of all superfluous amounts of the cells of the follicles, and in the periodical discharges of the female of the human family only a work of discharging the womb of such gases and electricity occurs. The undecomposed follicles are washed out by the operation.

Only the same kind of operation that takes place with the bladder when it is discharged of its contents, is performed in these periodical discharges of the womb.

A very considerable operation takes place when the developed offspring is pushed into a world from which its original organization was obtained. This bringing of a developed organization into the atmosphere is in all respects analogous to the evolution of the animal soul from the animal body, and the evolution of the human soul from the human body. The character of these analogous steps in the method of creating the final work for which all creation was intended, is the same in a great measure as the different steps performed in the development of a species of plant, or what may be termed, creating a plant genealogy.

In a plant genealogy an alternate development of a fruit bearing and an unproductive plant is produced. And if our scientific teachers could obtain a bit of rational understanding of the affairs of creation this great work of wisdom would have been pointed out to the whole world before. The plant is given a development, in the same way a phantom or soul of the plant is given development. The plant called corn, for instance, is a state of development of a small crinoid. This tiny crinoid is given a blossom as much like the tassel on a corn stock as its substance will permit. It will continue to grow in this character of unfoldment always in the same temperature and soil. But place its seed in a different or richer soil and warmer temperature and in a short time the plant will assume the character of a common thistle. The thistle will bear fruit in the shape of a sweet sip for the bee, and possess a superb stalk and blossom. When its seed is given a better soil and still warmer atmosphere, in a short time the plant is converted into a corn stalk, and the corn stalk and its ears of cob and thread and leaves will correspond to the same parts of the thistle.

This corn plant is without power to produce any sweet of the character that is produced by the thistle. A development of kernels of corn is caused in this grade of the plant's unfoldment. When the seed of the corn is planted in a still warmer and richer soil the result is a production called sugar cane, from which all the cane sugar is constructed. This ample supply of sugar for a whole world is obtained from the honey of a thistle, after the thistle is given the development possessed by the sugar cane. The honey of a thistle and the honey of a cane stalk are almost identical in character. If the reader is anxious to test the truth of this statement, it can be done by tasting each of these substances. When the seed of the sugar cane is planted in a soil still more developed and warmer, the cane is changed into a banana plant. In this state of the development of the thistle, the operation of producing corn takes place, and the only difference between the fruit of the banana and the production on a corn stalk is in the facts that a great bundle of cobs and leaves is produced on the banana, and that a cob of the banana is unable to consolidate sufficiently to cause substance for a kernel to be squeezed into existence through its pores.

The corn cob and its leaves and silken thread are plainly seen in every banana on the face of the earth. Let all who desire to test this fact obtain a banana and strip up its leaves and observe the shape of the leaves, the thread and the rows of partly prepared sockets, where the corn was only prevented appearing on account of the soft condition of the cob.

The hot atmosphere prevents the cob of the banana becoming more solid.

If this will not satisfy the inquirer let him cut one of these cobs in two and observe the picture of the interior of the corn cob. When a banana seed is planted where the soil is still more developed and the atmosphere yet warmer, as on the equator, the result is the production of what Mr. Darwin and several renowned authors have described as insectivorous plants—more rapidly developed streams of plant substance. Now, in

this exhibition of the alternate creation of honey and corn on a crinoid in its different states of development, there is all that is necessary for a botanist to understand in order to direct him in following the unfoldment of any plant.

The suggestion is, however, a mere waste of labor, so far as such authors as popular botanists are concerned, for they are too misinformed in these pursuits to obtain an understanding of a single law governing the plant creations, and it is a fact that not one of such teachers is possessed of the knowledge of a single law or method of plant unfoldment.

Will the reader give what is now to be stated as careful attention as possible, that all the steps of the unfoldment of what a plant evolves when it decays, may be seen to be in all respects analogous to the character of a plant development.

The creation that is given the atmosphere at the death of a plant is as incapable of bearing fruit as the tiny crinoid, but when it is given another step of advancement it will bear fruit. The animal female is the warm soil in which it obtains this step of further unfoldment. When it is given a development of the character of the animal it is capable of bearing a fruit of the character of its own organization. When this organization is decaying it is producing a creation as fruitless as the one from which the animal was created—a mere lifeless organization of the nature of a soul.

This development from the animal organization will be able to bear fruit when it is given a step further of unfoldment.

The further unfoldment is obtained in exactly the same way that the plant emanation obtained another step of advancement. The human female will constitute the warm soil in which the next step of unfoldment is taken. The result of this change will capacitate the creation for bearing fruit, and the fruit will consist of a reproduction like the organization that is unfolded. In the decay of this organization, another object exactly like the one the organization was produced from, except in form and the capacity of life, is given the atmosphere, and this object is unable to bear fruit. It can only bear the character of the human soul, for it is the soul itself

When this wonderful institution is studied the world will come to the conclusion that in a human soul only a mere production of what a plant or animal is capable of producing, with a better organization for the capacity of life, is to be discovered.

This understanding of the soul is sure to be obtained, and all the ignorance of the human family upon the subject will be removed.

In every land, from border to border of civilization, the herald of the discovery of the character of a human soul will be carried, and the world in a short period from this day will be through inquiring what a soul is and what gave it existence.

No power of the college or church can prevent the children of the earth obtaining a knowledge of the character of their souls, and in a very few years every vestige of the present theories and ideas of the church and agnostics concerning this wonderful creation will be swept into the oblivion of the past.

No church or scientific teacher is able to construct a theory inconsistent with this great order of the unfoldment of creations that can endure but for a moment, and all such attempts will be of no avail. The church is unable to see the way a Creator is operating to construct the thing it is trying to save from eternal suffering, and the scientist is unable to see what can possibly exist that cannot be observed by the senses, and the common mind is unable to discover which of these teachers should be believed. The only thing wanted by the common order of people to enable them to understand what the soul is, is the simple explanation of its creation. It is to be found in this article, and in a day not distant it will be admitted by the whole world

In our bodily existences it is merely intended that a completion of our souls shall be perfected. There is no other purpose for the existence of a person in this sphere of the worl

The body is created for no purpose but to become a mould in which to cast a soul. It is a mere mould for such a casting, and it is destroyed as soon as the casting is completed. In all the conditions of life there is merely a common understanding that our lives are in some way necessary for the preparation of a life beyond the death that awaits all. What that preparation is is no more understood today than when it was first suggested. The Church is trying to teach the importance of a righteous life, and a belief that only a con-

fidence in the theory advanced by a Jewish prophet of liberal opinions is necessary in order to obtain a home with the angels, and the scientific teachers are, as a rule, teaching that a future existence is a problem utterly beyond the power of the human mind to investigate, and the masses of mankind are accepting one or the other of such teachings.

Both classes of teachers are able to discover in the few facts now to be stated all the evidence of a character that is both scientific and capable of examination that a common mind can desire to establish the fact that in every person's head, and in every cell of the body, there is a portion of the thing called the soul.

Every one knows that in some manner the experience of the mind is given a chronology or character of record that is capable of being employed when it is desired, and that when a person remembers any past operation of the mind, or fact, or object, or event of the past, this chronology of the mind's experience is observed.

Now, if the character of this record can be understood, it will certainly satisfy us that on a portion of the soul itself this record of the mind is made and kept.

When a person is in fear of death, or is greatly excited from any cause, an instantaneous observation of the experience of the past is obtained. What is it that allows a whole life's experience to be observed as quickly as a stroke of the mind is ever made? And what is it that allows us to find any portion of the past experience of the mind by an effort of the will? The cells of the body in all the organs except the brain are too small to contain a record of such a character, and in the body there is no search for it. When we are trying to recollect anything of our past cognizance we generally close our eyes and cause a considerable amount of blood to congregate in the brain. If it is not made to appear at once we put a hand to the forehead and drop the head, and when this fails to cause the observation of the fact we place both hands on the head and the ends of the fingers over the center of the brain. If this does not recall the thing searched for we get up and walk, and continue walking until the object is seen

These operations are performed in order to create an excitement of the brain, and the excitement is, of course, for a purpose.

The purpose is solely to create a sufficient current of the electricity of the brain to light up this chronology of the mind's experience as it is lighted up in moments of great fear.

Now all that produces the faculty of memory is the lighting of the pictures of the mind's experience by a current of this influence thus generated, and which connects the whole brain with this gallery of pictures, and which is in the Bible called the judgment record of a child of God, and by which the child is to be judged in another existence. This gallery is simply the stampings of every idea or thought of a person on the condensing influence in the chambers or cells of the brain called ventricles. In these greatest of all cells of the body the current of electricity of the brain that is not employed in other offices of the organ, is constantly being consolidated, and on its condensed stratas are stamped the effects of the whole universe. On this delicate palladium of what is intended to chronicle the mind's experience, our thoughts are recorded. Upon the deposits of the oceans of our globe, produced by the washings of the continents and which consolidate in beds and stratas, are impressed the forms of the plants and animals of the periods in which such deposits were made. This stamping of the consolidation of the sand and mud, settled in the ventricles of our globe, with the forms of plants and animals, is analogous to the stamping of the consolidations of the current of electricity in the ventricles of the brain with the effects of objects upon the decomposing brain. In these wonderful stampings can be discovered a character of fossils that are capable of impressing the person with the facts of his experience, and those on the consolidated sands of a sea are capable of impressing all persons with the facts of the experience of a world.

What a grand and well calculated provision for keeping a chronology of the affairs of a natural organization. It is as much a plan of catalogueing the experiences of a world and a human creature, as the copying of our public affairs in well prepared ledgers.

No one is able to avoid a copying of his mental acts, and by their own account of their lives thus enshrined will all persons be considered in a world where the consideration is performed by themselves and those in their presence.

In all such considerations a perfect judg-

ment will be sure to be passed on the character of such acts as are thus enshrined.

Now, if this gallery of the copies of a person's thoughts is allowed to remain in the brain when the person is dead, there can be no intelligence in a soul, if one goes out of the body, and if a soul is created independently of the body, there can be no identity between the soul and the person whose life is ended, and whatever the intelligence of a soul may be it can have no relation to the intelligence of a being in this life.

And a spirits existence is in no sense a future existence of a person.

It is not in order to discuss this proposition further here, and it is only to establish the fact of the creation of a soul in the body that we are describing its construction. The idea to be obtained by discovering the philosophy of the construction of our mental records is that if the construction is as claimed by this argument, it must follow that, when we are using this gallery of thought pictures, or obtaining data of the past experience of the mind, we are simply conferring with a portion of the soul itself.

It is a fact that in every act of recalling a thing of the past experience of our minds, we are actually obtaining a view of the portion of the soul that is located in the centre of the brain. In the memory the soul is the object that furnishes data.

When a person is dead the ventricles of the brain are empty. When the brain is examined these cells are found to contain no substance, and all the cells of the body are also found to contain no substance. When the organs are without a current of the thing that constructs them they shrink, and when a hair is drawn from the head it will soon become contracted, and when a hair is taken from a dead persons head, it is found to be already contracted and without its previous character.

Every dealer in hair will admit that a dead persons hair is of little use and not of much flexibility.

In each cell and hair something is wanting if the person from whom it is taken is dead. A particular something is always absent when the person is in a coffin, or in a shroud, or in a grave. The whole organization will tumble to pieces, and a very rapid decomposition ensues. A careful examination of the cells and tissues of a dead person will invariably disclose the fact that a cleaving from their inner surfaces has taken place, of a character like what would take place if a delicate substance was detached from them. This very thing has been discovered in the cells of plants, and the cleaving from their interiors was supposed to be a withdrawal of the unobserved portion of the substance called protoplasm.

No scientific examiner will fail to discover in the cells of a dead person the marks of the withdrawal of something from their interiors.

In the human organization this withdrawal is performed when a current of the thing that afforded the life of the person is transferred to the thing that is withdrawn.

The actual passage of the interior portions of these cells through the body is performed, and it is done by the attraction of a current of what constitutes life.

The dying person is only giving the atmosphere a creation that can ascend on the current of the earth that is passing upward. No other philosophy is operated to carry an emanation from a creation of the character of a plant or animal or human being, into the atmosphere, than the one that is pushing up plant germs and budding the plant.

This upward movement of the earth's magnetic current is the cause of the ascension of the soul as well as the ascension of smoke or gases, or whatever arises from the earth. The will of a spirit is all that causes the descent of a soul to the atmosphere of the earth, or its movement in any direction. In the cleaving of a soul from the body, the soul is actually pulled out by the attraction of the earths current.

No person can die where the earth is not discharging a current of this character, or causing one to pass over the person, and if the functions of the body are destroyed from any cause where the earth is closed by the cold to such an extent as to prevent an escape or sweep of this influence, the body will not decompose or change its character. Such a disposition of the body of any creature is the means of suspending the destruction of the body, and it is observed in the preservation of the bodies of animals that perished in the colder countries. A remarkable illustration of this fact is witnessed in the dead or consciousless bodies of mastodons that are found in the ice and snow of the northern portions

of Asia. What a wonderful confirmation of this fact is found in a carcass of one of these great creatures which has been preserved for thousands of years!

Now, we will state as explanation why a plant or animal is not given a soul that can possess life and consciousness as well as the human being, that the cells of such creations are not capable of attracting a current of electricity that is in the plant or animal as the cells of a human soul can attract the current of the body.

The substance and construction of the plant or animal cell and its interior coating is the same as those of the human cell, and if the blood of the animal, or the fluid in the plant, would yield the souls of these creations at the moment of death, these emanations would possess life. But in the plant and animal the fluid that circulates in them is so full of substance that attracts the cell or its coating, the coatings will not be attracted away from the organization until the organization is partly decomposed. When the blood is so decomposed as to fail to attract the coatings of the cells, the work of discharging them into the atmosphere is performed. The difference in the circulation of the plant and animal and the human being, and the difference in the character of the substance are seen in the circulation itself, and in the productions from it. An animal's blood is capable of producing hair, feathers, bristles, wool or shell to cover the animal, according to the character of the animal.

A plant circulation is capable of producing only bark as a covering for the stock and branches.

Human blood will produce only a very delicate rind and a small amount of hair. The rind and hair are of the same substance, and except over the bones that have marrow in them, there is only a mere sporadic construction of hair, which is produced by the substance of which the rind is composed, and by being constructed in hollow tubes. Each hair is a small volcano over a pore of the skin. The substance of every hair is the same as that of the bones, only in a different degree of decomposition, and it is the substance of the marrow of the bones that is converted into each.

In a human being the blood is so free from this substance that only a small amount of hair is possible on the body.

In this greater purity of the human blood there is all the cause of the ability of the creation called the soul to get out of the body, for the attraction of the blood in the organization will not prevent the soul escaping from the body. How wonderful are the provisions of the Creator for performing the purposes of creation! How strange are the contrivances for doing what is designed for a child of the Almighty!

Now, all that is stated with respect to the magnetic character of the blood of animals and man can be verified by the way they are clothed, and by the degree of their decomposition in a specified time.

The blood of a dog will decompose faster than the blood of a human being, and the fluid of a plant will decompose faster than the blood of an animal.

This is all the explanation necessary of the cause of the inability of a plant or animal to give its soul a current of what constitutes life. The current is simply retained by the circulation until the whole organization is partly decomposed, and when this is accomplished the interior of the cells is attracted from the organization.

A whole volume could be written upon this most interesting question, and in the future it shall be again discussed in this paper.

An explanation of the cause of the absence of consciousness in an animal soul is completed when it is stated that where there is no life there is no consciousness.

In a plant emanation there is no construction of brain, and therefore no organ on which intelligence is impressed.

Such forms are merely impressed with the character of the motions of the plant while developing.

It is the adaptation of the cells and form of a plant to the motions of the plant in its unfoldment that causes the animal that is produced from its emanation to copy such habits as the plant possessed. How grand the design of the author of this work! How grandly the design is fulfilled! What a supreme institution is this thing called creation!

Now all that renders a human being capable of copying the traits of an animal, which constituted his origin, is the possession of a brain that was in a measure derived from the brain of the animal. The animal's brain was the cause of the creature's charac-

ter, and the general characteristics produced by the brain are repeated in the human being, for the same reason that the animal's motions correspond to the motions of the plant. To a great extent the motions of the animal are copied by the motions of the human creation.

This astonishing revelation of a most important and curious law will confound the observer of the fact, and it will seem to him that a whole world of scientific information is within the reach of a human mind. It is a fact that there is. So far as the inheritance of the traits and ways of the plant by the animal, and the traits and ways of the animal by the human being are concerned, the explanation just given is all that can be given, and all that is wanted. When we have described what is to constitute the most astonishing and most wonderful part of the evidence of our theory, an explanation will be found of the inheritance of the character and diseases of a parent.

Let us ask again that particular attention be given to what is about to be stated.

In the operation of the conversion of a plant or animal evolution into a living organization, and in the bestowal of the mother's features and disposition to the offspring, and in the copying of the male parent's features and character of development, and in the transmission of the peculiarities of the ancestry of the parent, and in the transmission of diseases, all the philosophy of what is called photography and mesmeric influence, and chemical composition of the substances of bone, and other portions of a bird or animal, or human offspring, that is not produced by the philosophy of growth, can be witnessed. The explanations of this character of work in a developing offspring of an animal or human creature, will be all we have to add to this article. In the explanation will be found the cause of difference in organizations that constitutes sex.

In an egg there is a considerable quantity of corpuscles, or cells, and a considerable quantity of substance that is produced by a decomposition of cells. The yolk of the egg is the decomposed substance, and the white of the egg is the undecomposed substance. An egg will become all yolk, if it is without one of those phantoms we have described, and is given time to decompose. The white of the egg is always yellow, if it is decomposed as much as the yolk. In the creation of the egg the time is given it for a partial decomposition, and the decomposed portion that is not thrown to the surface and consolidated into shell, as our bones are constructed around the marrow in them, is congregated at the focus of the egg. The congregation of this substance at the focus of the organ is caused by the same operation that produces stone in the gall or urinary bladder. It is a species of crystalization, or, what is better, a collection of crystalizations. The cells of the egg are able to cause a crystalization of the decomposed parts, in the same way that all crystalizations take place, and the process commences at the focus of the egg, for the reason that a mere focus of the current of electricity that is sweeping around the egg is created at this point. This perfect illustration of the orbit of a planet around a focus of the solar system is a greater disclosure of the cause of a planet's revolution, and the shape of its orbit, than can be found in all the works on astronomy published since the great and ill-treated Kepler discovered that a world was caused to sweep over a space of the same area within its orbit every day of its revolution.

The character of the current at the focus of the egg is precisely what is taking place at the focus of our solar system. It is merely a concentrated current, and at a point where there is only a rotary motion of its substance. The point at the centre of the current is capable of commencing the congregation of substance of the decomposed parts of the egg, as any substance whirled in a fluid will congregate in the centre. Every ocean current produces a similar congregation of matter. Now, it has got to be discovered that in an egg there is as regular a circulation as there is in an animal or human body, and that the circulation is wholly of the current of electricity that is generated in the decomposition of the egg. Great heavens! What a solution of the problem of the causes of the whirling of the solar system. It is actually true that in the egg the same operation takes place that takes place in the solar system.

An egg with several yolks, and rings of small particles of decomposed cells around each yolk, and a convoy of moons for each yolk, except the central yolk, would offer a very good picture of the solar system.

Now, if this egg is not possessed of a creation like the thing that we have described as developed in a plant, or rather its blossom, this whirling current is sure to decompose every corpuscle in the egg, and accomplish nothing more.

The crust is broken when such a decomposition is performed merely by an explosion of the egg. No scientist of the world has ever found out why an egg can in most cases, if it is warmed by the fire, or by steam, bring forth a creature with organization and life, and having muscles, bone, feathers, and all the substances that a bird can possess.

The great Cuvier was a long time trying to discover how this could be accomplished. He never found it out, and the world is today as ignorant of the cause as when the subject was first considered.

It will be explained in this article, and when the explanation is read, it will be seen to be the most simple affair of the generation of organization, except the production of insects.

A bird is but one step more of unfoldment than an insect, and it is but a step less of unfoldment than a mammal.

The reptile is as much a construction of the one order as the other, and it is only a most prodigious insect.

The possession by an egg of a creation that will cause its decomposing substance to cling to its parts would cause the thing to become clothed with the substance merely, and if the object was not changed in form, it would simply be a construction of the same shape still. But if it is gradually changed by a creature's influence, in a way to cause it to possess the form of that creature it will become a creation of that character so far as form is concerned. If it is given a current of the influence that produces life it will become a living creature of that shape. If it is given a chance to get out of the shell it will scratch and fly and cackle, or crow or sing.

All of the changes that take place in the egg are the decomposition of the cells, the conversion of the creation from the plant into a different form and the bursting of a shell. Now, this is all the explanation a world is wanting to enable people to understand why a bird can be brought out of an egg.

The feathers and bones and claws and beak, every organ of the bird that is constructed of cells, is produced by the ordinary operation of growth. Before any of such organs are produced the chick is given a means for their construction. It consists of a current of electricity to do the growing.

Now, we desire the reader to watch the statements of the balance of this work.

When the chick is given this current it is able to commence the process of eating, for it is in the digestion of what the chick eats that the organs obtained by growth are constructed.

How can it eat? and what can it eat? It cannot get food outside of the shell!

It must get it inside. Now, it is always the fact that when the chick is hatched, there is nothing in the shell but the chick. The chick has actually eaten up all there was in the shell, except itself. No physiologist will dare to say that the chick was entirely constructed by the congregation of substance from any cause, for there are the cells and the feathers, all the products of growth, as all cells and feathers are.

It must be admitted, then, that in the shell the chick actually eat up all the substance, except what was already appropriated to its construction before it could eat.

Another wonderful phenomenon is disclosed by the hatching of a chicken when the incubation takes place from the effects of steam or heat in the absence of the parent bird.

The same philosophy is operated, as if the parent was sitting on the egg.

Now, if what is stated is true what can produce a chicken in an egg that is a great distance from the hen and in a hatching box?

Why does the apple seed produce an apple tree when planted a great distance from the parent plant?

The philosophy of conversion is identically the same in each, and it is simply the capacity of the parent bird or plant to influence the development of its seed wherever it is. It is a mere magnetic current that is capable of converting the object in the egg into a creature like the object from whose organization it was produced. This very astonishing operation of the magnetic current of the bird upon the developing chick is the same sort of work as the giving of information of the misfortune or death of a person to a relative or friend, who is a great distance away. It is the philosophy that is operated in informing the untutored savage of the danger of an ap-

proach of a hurricane or great storm. It is the wonderful operation of giving some writers a clearer view of nature than is generally obtained. The philosophy will do a vast number of wonderful things, and the most wonderful of all is the way it gives the human mother a means of causing her child to give her its affection as long as it lives.

A whole catalogue of the constructions of this method of creating copies of objects can be given, and it shall be given in the future numbers of this paper. A photograph is a thing the world shall understand, and all similar phenomena will be explained. Let us dismiss the consideration of the egg by the statement that a chick is enabled to get out of its shell by the shell being broken by the chick's growth. The extent of the beak and claws of this young being is so great that the pressing of the feet against the shell will cause the beak to penetrate the shell where the beak is touching it. It is this pressing of the beak against the confining crust that always causes the chick's head to make its appearance first, when the chick is hatched.

In what has been stated concerning the development of a bird, there is explained all the philosophy that is operated in producing a living organization in any creature or in any creature's eggs.

No other philosophy is wanted in any species of animal, and the sex of the offspring of every species of creature is produced solely by the magnetic control of the embryo, by the parent or both parents. The bird is given a difference of organization merely by the change of the intestinal arrangement. In what is called the male bird there is only a considerable excitement of the anus produced by a rapid decomposition of the substance in the intestine. This difference in the decomposition of the substance in the stomach and intestines of the male bird, is the means of preventing an egg from forming in the male, and at the same time creating on the outside of the bird a finer and more beautiful amount of feathers.

The difference in the decomposition of the substance of the feathers, as in all other substances, is the cause of the difference in color. No author of science will for a moment pretend that there are sexual organs in a bird. The creation of a male sex in the offspring is wholly through the influence of the male birds of the family, operating on the developing embryo.

No other method is possible.

It is the same operation in the development of the male sex in any species of animals, and it is capable of proof by the fact that every species of animal that has passed out of existence, was destroyed by the disparity of sexes, and every species of animal on the earth will be destroyed in the same way. When one sex is out of existence, the other perishes as a consequence.

The Creator could devise a means of producing the extinction of any species of animal without the destruction of life.

It is only necessary to add to this explanation of the cause of sex, the statement that in the human creation, a sex is provided when the mother is in possession of the object that is to be transformed into a human being, for an animal soul is possessed of sex. What a great problem this inquiry as to the cause of sexes in human beings?

Its solution is now given the world, and the problem will never be speculated upon after this work is examined.

Now, our article shall be closed as soon as we can give the explanation of the birth of a child, and have stated what will enable all mothers to bear only good children.

A child is actually pushed into the world. When it is sufficiently developed to cause a considerable amount of its own magnetic current to be discharged in the womb, the current will commence to push the child out. The position of the womb is such that whether the mother be standing or lying the child will press against the mouth of the womb. The generated current of electricity will press the child in the same direction, and as it does so it will gradually escape through the walls of the womb, and replenish the strength of the mother. When the child is still it will generate another current and the operation is repeated. A few such operations bring the child into the atmosphere. When it is born it screams because it is obliged to relinquish the source of its nourishment. It will cry for years afterwards on account of the same kind of deprivations.

The other substance in the womb is pushed out as soon as its decomposition produces a sufficient current to push it out.

This will be a good item of news for the medical profession, for they are anxious to

learn what pushes out both of these creations.

In every birth of a human being there is a complete operation of giving the world a creation that was in it twice before. The very well-developed person is often admonished of this fact. When he is conscious of having seen the condition of things in a place that the body he occupies was never in, or of coming in contact with objects that are familiar to him, although never seen in his human life, he is only conferring with what occupied his attention when on earth before.

Now, a whole community can be well developed if people will only remove from their midst all the brutes of a worthless and vicious character. This is all that is necessary to create that prayed-for millennium of civilization in which all men shall be capable of following the golden rule.

A world of humanity is to be cultivated in this way, and it is the only way to prevent the creation of classes of society that are committing crimes and vices.

When a community is thus improved, a chance is given for the coming of the Lamb of Peace, and the greater coming of that day of General Jubilee, when the exile of all that constitutes the happiness of man will be ended.

OFFICES OF ELECTRICITY IN THE EARTH.

Chapter I.

The grand and wonderful operations that are embraced by the term geology are what this article is intended to explain. The offices of the great and all-competent influence called electricity in the creation and unfoldment of the world are all that is included in the department of science which the geologist attempts to teach.

A delineation of the operations of this influence in the globe is sure to disclose the cause and the methods of the development of the organization, and the means by which all the constructions upon the earth are given an existence.

To trace the constant, simple and important work of this single agent of creation in its contact with and coursing through the old planet on which our creation was ordained, is all that is necessary to enable us to understand the whole *modus operandi* of unfolding the planet and producing on its surface the entire varieties of water, rock, metals, soil, plants, the inequalities of surface seen in the mountains and valleys, and the cause of the commotions of the earth's crust of the character of earthquakes and volcanoes, the cause of storms, auroras about the poles, and the means of producing the quality of atmosphere necessary to sustain life, and, finally, to discover what part the earth performs in the grand and wonderful economy of the organization called the solar system.

This tracing is the great task before us, and if it were not a fact that it was but a single influence operating only as a single force can, and must, operate, and in ways as simple as a simple agent is capable of employment, and producing only such results as a uniform exertion of the agent can produce, it would be a task which the writer would never undertake, and one that would baffle the faculties of the human mind, and give the dwellers of the earth an unsolvable problem.

It is not the case with respect to the problems of the earth's unfoldment, any more than with any of the operations of nature, that they are unsolvable and there is no greater difficulty in understanding what has operated to convert the globe as it was originally created into what it is to-day, than there is in understanding what developed a plant or a snail.

It was a work less complicated than the creation of the snail, or any living creature. The orders of creation are more complicated as they increase in degree of unfoldment, and a plant of the simplest order is somewhat more complicated than the earth in respect to its construction.

When a better view of all the organizations of nature is obtained, and the methods of creation are better understood, it will be no great wonder that a world is comparatively a simple organization when considered in connection with the plant or animal.

The whole of the organization is only a component part of the greater organization, the solar system; and its development is only as great as will enable it to perform its functions in this greater organization. The impossibility of its being further developed in respect to the character of its organization is to be seen in what it is intended to perform in the great arrangement of stellar bodies.

No change in the character of its organization can take place, any more than the character of an organ of the body can be changed. The only change that can be made is a further unfoldment of the organization itself.

Now, a clear and definite understanding of this world, the character of its construction, its relations to the other bodies of the solar organization, and the methods of its unfoldment, are within the capacities of any person who will continue to investigate the work.

The only reason why a complete analysis of the problem was not given the world centuries ago, was the fact that it was not conceived that a single force of any character was capable of accomplishing the work of unfoldment, or that the force called electricity was concerned in the work. A thousand persons have lived who were competent to unravel the whole problem if it could have been

seen that one simple influence was competent to accomplish the affairs of creation.

This very conception of the capacity of an influence of which the world, as yet, is entirely ignorant, is all that is wanted to enable the scientific mind to unravel every problem of creation.

The work is neither long nor arduous, and it can be performed in a few years' time, and with much less expense and employment of mind than is bestowed upon the chess board in any town of the country in the same period.

What a fearful undertaking this work of solving the problems of creation does appear to the world, and particularly to the scientist. What great wonders these problems must be, if the giant Spencer, so-called, of Old England, is correct in declaring that only a few of the problems of nature are within the power of the mind to investigate!

What an ignorant mass of creatures mankind must always be if it is a fact that only a small circle of the works of creation can be understood!

What a forlorn condition of the children of the Creator, if it is true that they are to be constantly subjugated to the most meagre and unsatisfactory understanding of their surroundings. This condition of the human family, if it is a fact, is a species of degradation and slavery as unjustifiable as any other species of slavery or human degradation. This idea is only a mere fancy of the mind, however, and it is the result of ignorance only. There is not a ghost of truth in the whole of the declarations of the agnostics concerning the power or the limit of the mind, or the unsolvable character of the questions of nature. Every conception of the mind is a step in the direction of the solution of such wonders, and it is only to be increased by further conceptions of the subjects, when the colossal work of the mind is found to be only a mere attraction of the will in the direction of the inquiries. The mere capacity for reflection is all that is wanted to render a person capable of climbing to the summit of the pyramid of science, and from its heights to be hold the very processes of the operations of nature.

A work of such importance as the truths of geology should be given the world at this period, when there are so many enterprises that are only limited by the ignorance of the people of what can be accomplished.

A whole volume of most important facts is yet to be disclosed of a geological character. A complete overthrow of nearly all the present theories of the geologists concerning the world's development and condition is absolutely necessary before any rational understanding of the globe can be obtained.

It is high time the world was informed of what the earth was constructed, and of what all the substances of the earth were made of and how they were made.

The people will get this information in this article, if we can give it.

The crust of the earth shall be examined and explained. The rock shall be examined and explained. The metal shall be examined and explained. The plant shall be examined and explained, and the way all such things were produced shall be examined and explained. The whole of the metals shall be given an explanation. Every substance of which the crust of the earth is composed shall be given an explanation. The construction of the water of the earth shall be explained. The construction of the atmosphere shall be explained. The chemicals of the earth shall be explained, and their nature explained, and the purpose of the world's organization shall be explained.

This immense amount of explanation shall be given in a few chapters of this paper, and the whole of the work will not contain more than one-third as much printed matter as is contained in what are called works on elementary geology.

There will be no necessity for more than one-third as much matter and it shall be so plainly performed that any person capable of reading it can understand it as well as the most learned scientist. This apparently bold statement will be seen to be a simple fact, and it will be so well fulfilled that it will not appear astonishing to make it. We are not in the least elated over the result of our investigations of the affairs of nature, and it is a pleasure to give our conclusions to the readers of our paper, merely because we think they should be observed.

A far greater amount of work can be found in the publications of any well-known author of geological science, and if such works were competent explanations of the subjects of this

science, they would be very much simpler and considerably less in extent.

If they were correct there would be no occasion for this article.

It is only to remove the errors of such works, and to point to the operations of law and the plan of its operations that this work is intended.

Let all who observe what is stated give us their careful attention, and give the propositions to be advanced a careful consideration. It will be a work that no scientist will wholly deny, and if it is only partly true, it will be worth the attention and examination of our readers.

On every aspect of creation, and in every organization of the universe, there is an unmistakable index of the way the universe or the organization was created.

This index is as unerring as a mathematical principle.

It is only a mere principle of the operation of law that the index is intended to point to. The solution of the problem is but the watching of the operation.

With this preliminary introduction to our work concluded, we will commence the watching of the operations of law that constructed, and to this hour have continued the unfolding of the grand old globe.

In the completion of the globe a work was performed precisely like the creation of a cell in a plant or animal organization, and a cell of the same character in all respects was made.

This construction of this cell in the system of cells constituting the solar organization was only a condensation of the great ring of what is generally described as nebula by the teachers of astronomy.

The nebula was only a current of electricity which was revolving around a centre of the solar system. Every one of the bodies of this system was constructed by a condensation of a similar ring of this influence. The whole of these cells, and such condensations as constitute the aerolites and asteroids, are all the affairs of this vast organization of worlds, except the great current of this good influence that is so steadily and faithfully performing the revolutions of all such creations.

The comets are but partial condensations of the current that is sweeping between two planets, or planets and the sun, and which are decomposed by the same current as soon as they are capable of offering a resistance to the current. These partial condensations or the current are simply burned up, in the same way that a current of electricity will burn up any substance that is in its path when its motion is given a great velocity. In the phenomenon of this character, there is nothing more than is seen on any night of the year in the form of a meteor—"shooting star"—as it is passing in our immediate atmosphere. Both of these exhibitions of the burning of a condensed amount of substance in the space above us are not only pleasing instances of the designs of creation, but are calculated to prevent any more constructions of a stellar character. A full and complete discussion of such phenomena will be given when we are discussing the subject of astronomy.

The illuminations called Milky Way and nebulæ, are merely creations of a small amount of light by the multitudes of stars in particular localities. These phenomena are as simple as the halo around a gas or lamp light when seen at a little distance in the dark. The Milky Way is but a band of such light and it can be as easily described as a light on the candlestick. The detached objects of this character are in all respects the same, and are detached only because the clusters of stars that create them are detached. The stars are only small bodies in the atmosphere of the earth, and are capable of being attracted to the earth occasionally, and the fallen stone and iron objects called aerolites are the stars that the earth has attracted to it. The construction of these small bodies, and the cause of their existence in a great ring around the earth, are as easily explained as the construction of a snow ball.

The only thing that prevents them sweeping around the earth in the same way that the moon sweeps around it is the fact that their locality is where the earth's attraction is too weak to cause them to whirl around it.

They are almost stationary, and this wonderful provision for giving the children of the earth an ever-changing adornment of the heavens is as interesting a subject for contemplation as nature affords.

If they were passing around the earth in equal periods, only a partial and very unsatisfactory view of them could be obtained, while as they are controlled, every year gives the whole ring a beautiful exhibition to mortals.

A wonderful Calculator, this Author of creation. How unappreciative are the people of this unseen Calculator. What a great and wonderful adornment of the sky this Designer has instituted. What would we do if a cloudy night could be followed by only a darker sky? What could a mortal observe of beauty in what is now a vast and decorated arch of the sky, if there were no objects to be seen but an occasional planet, and a fast fading and periodical moon?

When these objects are discussed in a chapter in the article on astronomy a better description of these majestic creations shall be made.

In the organization comprising the objects just denoted, there is all there is of the universe.

No telescope can reveal anything beyond it, and there never will be an object seen that is not in this organization. If any other system or object exists beyond the circumference of this system it will be forever unknown to the people of this earth. The only thing that enables us to discover the presence or locality of any object in this great system of worlds is the capacity of the illumination created on one side of each body to extend its scintillations to our eyes. In this operation there is merely a vibration of the magnetic current stretching from such illuminations to our eyes. The most distant of these objects are barely observable with the assistance of the most powerful telescopes. Any object as much farther from the outermost planet as such a planet is from the one nearest to it could not be an object of sight by means of any instrument of a telescopic character.

This is, however, no substantial argument against the existence of other planets.

A complete answer to the inquiry whether there are more planets than those discovered can be obtained by a description of the method of the creation of those that are found. This will be obtained in our work on this subject.

It can be as easily determined whether there are other planets, as a question whether a dress pattern that is made into a dress can be made into another such dress.

This is all that is necessary to state in this article concerning the construction of the solar system. In describing the co-operative work of the earth's great current of electricity, in producing the heat and light of the earth, a mere synopsis of the means of heating and lighting all the bodies of this system will be given.

Now this cell of which the crust of the earth was created, was a mere shell of the same kind of material as the cell of the plant or animal, and the difference between it and these smaller cells was barely in size and condensation. The cell of the globe was more condensed. Its condensation was sufficient to bear on its surface every object intended to be constructed on it, and as everything to be constructed on it, except the water and atmosphere, was to be constructed of the substance of the crust itself, it was only necessary that the crust should be of sufficient strength to bear the water and atmosphere.

In any piece of mica a piece of this crust of the earth is seen. All the mica of the globe that has been disclosed was once contained in this great sheet of mica that constituted the earth's original condition.

This fact will be abundantly proven in the course of this discussion. It could not be established in any way but by disclosing the means or the causes that presented this substance on the surface of the earth wherever it is seen, and the disclosure of the philosophy of the upheavals of the earth's crust that have taken place, if it was not possible to discover that every organization is but a construction of cells.

At this part of the discussion it is only proper to state that wherever there is a condensation of electricity the result is a construction of this character, and a cell cannot be constructed in any other way. In the strata or scale of this substance there is but a result of such condensation at one operation. In every subsequent, as well as in each previous condensation of the influence a strata of this mica was created.

No other philosophy for creating a world was necessary, and it is to be seen that the stratiferous condensations of this substance were necessary in order to allow a development of the globe.

The decomposition of this stratified shell could not have been performed as it has been performed if a single body was created of great thickness.

When the construction of the shell was completed a means for converting it into what is now on and in the crust of the globe was, of course, necessary, and it was equally

necessary that the operation should be one that would convert the crust into all the particular kinds of soil necessary for the production of plants, and when the soil was prepared to convert a part of it into such plants.

Now all that was necessary to cause the accomplishment of such a work was to create a current of this great agent of decomposition and construction, which would constantly and uniformly operate to decompose the crust, and at the same time provide a means for the construction of plants. This very strange contrivance was actually established, and it is the method for producing all the vegetation on the earth, and it was the contrivance for preparing the soil for the development of such vegetation. No one can for a moment understand what this wonderful provision was or is until it is thoroughly explained. The explanation can be given only by stating the general character of the wonderful sweep of electricity into and out of the earth.

The operations of the current in its great and constant circuit will be described as we proceed with this work.

In each globe of the great system of worlds called the solar system there is a provision for the current of electricity that is carrying them around the central planet to course through these bodies. The current that is generated in the escape of this current from each of such bodies is the one that is constantly furnishing the motor for the whirling of the entire system.

In all the wonders of the stellar organization there is none so astonishing as the fact that the whole arrangement is automatic and a veritable perpetual motion.

It is a work of actual self-operating contrivances.

No author of science will deny this if it is explained how it is done.

The explanation can be given, and it shall be when we discuss the stellar creations.

All that can be said in this connection concerning this arrangement, is, that in the absorbing of a portion of the current that sweeps around the whole system, the earth obtains the force that is all the while developing it. At each pole of the globe this current is drawn into the earth, and at all the other parts of the earth's surface where it is not closed by the contracting influence of cold or a great deal of water it is being discharged. The discharge of the current, creates a complete circuit of the current, for on each side of the equator the current that is discharged passes to the pole on the side of the earth from which the current escapes, and is again drawn into the earth at the pole, and in this coursing of this current all the provision for the development of the earth and its vegetation is found. Everything that is necessary to be done to disclose the processes of nature called geological phenomena, and to discover what has taken place in the earth in all past time, and obtain a perfect understanding of every geological fact and problem, is to discern what this current of electricity could do, in and on this great shell of mica we have described.

Astonishing as it may appear, it is true that a school boy, with an understanding of the effects produced by a current of electricity in motion, can trace the whole of the operations of this current, and uncover every problem of geology.

Let us state to the gratification of the reader, that in any good atlas there are all the facts to be seen that will be wanted in order to discover that everything that is now or hereafter stated is true. It can be so plainly seen that a geography will be a welcome guest in every household where a peep at the work electricity has done in the earth is desired.

The balance of this article will be simply a description of the operations of this influence, that courses from the equator to the poles. In this description of such operations all the causes of the creation of every inequality of surface, and the construction of rock and metals, and soil and water of the globe can be ascertained.

All such affairs are but the result of this great sweeping of this current.

The atmosphere is only a continuation of the condensation of the electricity of the solar system, and each atom of gas of this abundant element is but a small globe of slightly condensed mica.

The atmosphere is condensed simply by the cessations of the pulsating current that is passing over the earth. When the current is halted a slight condensation takes place, and if the atmosphere becomes too much condensed, it creates meteors "shooting stars", and the more condensed portions

are burned up by the current that is passing over the earth.

These objects are caused to descend when they are of sufficient density to be attracted by the earth, and in this whirling of these bodies in the direction of the earth, a chance is afforded the current to burn them up. No other method is necessary for this work

They are so easily decomposed that a slight velocity of motion will cause their decomposition. What a wonderful problem! The whole of the philosophers of the earth have failed to satisfactorily explain this work.

The astronomers are as much in ignorance as to the nature of these objects, and the cause of their burning, as they were in ages past.

The water of the earth was created, as it is created now in every part of the world's atmosphere. The substance is only oxygen and hydrogen, and a current of electricity passing in it.

A mere burning of atmospheric gases was all that was necessary to furnish hydrogen, and this was accomplished in the same way that the tiny meteor is destroyed.

The sweep of the earth's current through the atmosphere burns up a portion of the gases, and the burned substance is hydrogen —a fine condition of carbon—it is not a metal. This carbon and the oxygen, which is a little finer in character than the nitrogen creates the water.

The earth's current of electricity also furnishes the electricity of the water. It immediately unites the oxygen and hydrogen, and which in all cases creates water.

In every rain storm that occurs, a part of the water that falls is created in the atmosphere.

In the fall of snow there is a wonderful creation of crystals, and the world is entirely ignorant of the cause of their construction.

It is when snow is falling that these crystals are created, and without the existence in the atmosphere of the objects around which the crystalizations are formed there could be no snow. The vapor would descend in the form of drops, either solidified, as in hail, or in the condition of water. The objects that attract the vapor around them in crystals are shaped exactly like the snow-flakes or crystals.

This most interesting provision for covering the earth with a soft and light substance to protect the perennial plants, and the roots of all plants is going to receive an explanation.

Every snow-flake is shaped in the same way that a worm or insect is shaped, and that is by a substance being attracted to the parts of a creation that is evolved from a plant or other organization.

The organizations that evolve the objects that attract vapor into snow-flakes are the vast and curious algae of the oceans. These crystals will in all cases appear of the same shape as these algae. Many so called zoophites are really algae. Every form of these plants is seen in the snow flakes that fall from the vapor. Let the reader obtain a chart of snow flakes or crystals, and another of the algae of the ocean and compare them. In such comparison a perfect copying of the algae of the ocean can be seen in the snow flake crystals, each plant being represented with almost perfect accuracy. How astonishing this disclosure of the cause of the snow flakes! In every organization that is created a soul is also created, and the soul is given the water or atmosphere at the death and dissolution of the organization. It is in those algae that a creation is made that exists in the water when the algae are decayed.

The emanations of these organizations are passed into the atmosphere in the evaporation of the waters of the ocean. And it is always the case that the snow falls only after a considerable wafting of the vapor of the ocean over the land has taken place.

When the earth is closed by the cold and its current cannot escape, the crystalization of the vapor in the air can take place. This is prevented when the earth discharges its electric current, for the current will not permit the crystalizing, and only in winter after a wind has brought the emanations of these algae from the surface of the oceans can snow be constructed. This is all the explanation necessary of snow, and we ask that it be examined.

The reason why the emanations from land plants do not cause crystalizations of the same nature, is because they are too delicate, and only in a quiet atmosphere of the night, on window panes, and on all smooth surfaces where a slight amount of water is congealed can they cause crystalizations.

In all such stamping of the windows and

flagging of our dwellings there is a soul of a plant portrayed.

Now, what credit will the writer obtain from the scientific authors for solving a problem that the whole body of scientists from the earliest time has failed to unravel?

The writer will obtain from this class of authors only a mere silence, and in another decade of the world the same class will give the porblem a still greater silence. This silence will be produced because the problem is already solved.

When the whole of this article is read it will be found to contain a considerable number of the metamorphoses of science, and they will have a sedative effect on such authors as love to remain quiet when a storm is blasting the pleasant affairs of nature. They will lull all the authors of science into a lasting sleep, and because they will continue as works of fact as long as man can live.

Now, it will be a pleasure to our readers to learn the cause of those fantastic auroras that adorn each pole of the earth, and it will be learned when the statement about to be made is read.

In the passage of the earth's current of electricity into the earth at the poles it is creating an electric light identically like the light created by a current of electricity passing from one carbon point to another in a common electric light.

The electricity in sweeping through the atmosphere at this focus of the current creates a species of lightning.

The creation of the light is solely a vibrating of the current in the atmosphere as all light is created.

This simple cause of an aurora borealis or australis is only the same as that of the phenomenon seen in the sky at the morning sunrise, and as long as the day lasts. These lights are but copies of the concussion of the earth's atmospheric electricity, by being struck by a current from the sun. This is what we call the sun.

The fact is so easily established we will undertake to give the proof in another chapter in a few paragraphs.

This is all the space our paper will permit us to publish of this article at this time

In the following chapter a whole catalogue of wonders will receive our attention.

Chapter II.

When the previous chapter was concluded, it was promised that an explanation of the cause of the light and heat of the earth would be given, and the promise shall now be fulfilled.

We have in this paper on two occasions given a partial explanation of this philosophy, and it was intended as a preparatory suggestion of this most interesting and all important contrivance for giving light and heat to the world.

This wonderful contrivance is only a concussion of the current of the earth's electricity with the current that is sweeping around the whole solar system.

The current that is discharged by the earth is given a vibration by this concussion, and this vibration of the current is all that constitutes the light and heat of the world. The current that is sweeping around the solar system is a creation of the sun, and it is simply given the same direction of motion. When it is conflicting with the current of the earth the concussion that produces the vibration is created. No one can distinctly understand what this conflict is until it is seen what two currents of electricity can accomplish when coming in conflict. It is already known that when two such currents meet a spark or flash of the concussion is seen; and if the currents are great it will produce what is called lightning.

The only cause of the light is the vibration or concussion of the currents on the eye, and the light is but an effect of the vibration on the organs of sight. The eye is so affected by this intense action of the influence in the atmosphere that it will experience a slight concussion of the current of the optic nerve, and the concussion of this current is communicated to the brain.

All of such phenomena are but a sense of feeling inherent in the organs of sight.

The sound resulting from a considerable concussion of the currents of electricity is but the effect of the vibration of the atmosphere, and when the concussion is so slight as to produce no vibration of the atmosphere, the only effect on the senses is the creation of light. The only thing necessary to create a light is the vibration of the electric current of the atmosphere.

The only thing necessary to produce sound is the vibration of the atmospheric gases.

Now, it is a fact that if there was no water in the atmosphere in the form of vapor, we could only obtain light from what is called the sun. Heat is in all cases but a vibration of the water of the atmosphere, or of substances that have as much or more density.

When a concussion of the atmosphere is produced by any operation in it, it will produce no heat, unless it is so intense in its motion as to vibrate the vapor in it.

The reason why the atmosphere will not produce heat when it is dry, although in a state of vibration, is because the gases of this element are too volatile and light to create any combustion or change in the object it comes in contact with. The presence of vapor in all parts of the earth's atmosphere prevents this fact being realized, except by a careful watching of the changes in the atmosphere and the effect of changes in the amount of vapor in it. It can, however, be demonstrated by experiment, and this has been done.

In every summer season a chance is often given by the evaporation of water from the earth, to witness the effects of a dry atmosphere.

Whenever a warm atmosphere is produced it is always attended by a considerable amount of vapor in it in a state of vibration.

This action of the vapor will cause its greater expansion, and a greater evaporation on the surface of the earth.

When the earth is comparatively dry, and no considerable evaporation is produced, it will commence to grow cold.

The vapor near the earth is ascending, and the absence of the vapor will produce the decrease of the temperature. This is the provision for cooling the atmosphere when a drought is taking place, or where the country is not watered by rain.

If the atmosphere was the source of heat, the continuation of sunshine for a few days would create such a heat as would destroy all life.

Nothing but a greater degree of dryness of the atmosphere produces cold in winter, or around the poles, and the atmosphere is rendered dry by the fall of the vapor. The fall of the vapor is produced by a decrease of the vibration of electricity in the atmosphere.

The decrease of the vibration is produced by the greater distance of the concussion that causes the vibration.

In our work on astronomy the cause of the changes in the position of what are called sun and moon will be completely explained.

This explanation of the shifting of the so-called sun and moon, or what are supposed to be the sun and moon, will be given the people for the first time in the shape of a scientific discussion. The most astounding facts will be disclosed, and it will be a disclosure no writer upon scientific subjects can or will attempt to deny.

All that can properly be stated here is the fact that in the changes of the orbit of the moon as it courses around the globe the cause of the change of seasons is to be found.

These changes of our atmosphere, and of the length of days and nights, are produced solely by the changes of the orbit, or what is better, the position of the moon in respect to the earth. In a careful study of the changes called seasons, and the changes of weather, it is possible to discover that every change of temperature is produced by the moon.

But when it is understood what this body is, and how it can effect our atmosphere, it will be as easily seen what causes a change in weather and seasons as it can now be seen what produces day and night.

In all the works on astronomy that are being studied in the schools, and in all places where a desire to obtain knowledge of the stellar organizations exists, there is a common consent that the earth is spinning around the sun in a way to present its surface to a great ball of ignited substance, on the north and south of the equator alternately, and that this onward spinning of the earth around this ball of fire is the cause of the change of seasons

The idea is quite in keeping with most of the present theories of astronomers on astronomical subjects, and it is quite time it should be given a departure from the minds of the people.

Let us now commence an examination of the unfoldment of the globe, and when it is appropriate to discuss the phenomena of the ocean currents, and the effect of great bodies of water on the discharge of the earth's electric current, it will be shown what the curious objects are that are so exciting the scientific world, called sun spots. It can be better understood when the cause of these currents and the character of the influence of these bodies of water are explained.

The oceans are as instrumental in the development of the world as the current that is creating objects on and in the earth's crust, but the offices the oceans and other great bodies of water are fulfilling, and have fulfilled, in the construction of continents and elevations of the earth's surface, and in the construction of the chimneys and valves for the escape of the earth's great current of electricity are absolutely unnoticed in scientific works.

All of these offices, and the effects of their execution will be carefully considered as we proceed in this article.

The cause of the present localities of the water of the earth, and character and extent of water at different ages of the world will also be considered.

In the creation of mountains and smaller upheavals of the earth's crust, we shall find the construction of all the metals.

In the creation of the islands and coral reefs we shall find the construction of the salt that is giving the ocean its briny condition. In the creation of the rocks we shall find the construction of what is converted into soil.

In what is converted into soil we shall find the means of plant development.

In the plant we shall find the means for creating both the bodies and the food of animals.

In the animals we shall find what constitutes the origin of human races. In the human races we shall find what is requiring a great deal of knowledge of what has preceded man.

All that was ever performed in the crust of the earth, in order to create the substance called silicon, was the partial decomposition of the mica constituting the earth's shell.

The electric current that sweeps out of the earth from the interior to the surface, and from pole to the interior, does in this circuit constantly decompose the world.

The current in coming through the earth's crust partly burns the substance of the crust. This decomposition of the mica crust produces silicon.

This substance can be produced by decomposing mica, to a slight extent.

In the decomposition of the mica a substance is produced called quartz, and it is only a small amount of decomposition of silicon. In other words, mica, a little more decomposed.

In the decomposition of quartz a substance is produced called felspar, and it is only a greater decomposition of mica. In the decomposition of felspar a substance is obtained called marl, or a still greater decomposition of mica. In the decomposition of marl, a substance called chalk is produced, a yet greater decomposition of mica.

In the decomposition of chalk, we have a substance from which magnesium is obtained, and only a greater decomposition of mica, and when magnesium is decomposed a substance called oxide of magnesium is obtained, and this is a substance that is next to gas in condition.

Now, with this understanding of the properties of mica in different states of decomposition, we can begin to see what a constant decomposition of the crust of the earth would produce, and in these substances and their modifications by the operations of water, air, and the pressure caused by the earth's attraction, are all the substances on, or in the earth's crust.

Every one of the substances named is produced by the decomposition of the mica crust of the earth.

It is well to state in this place, that in the use of the word decomposition, we mean simply the combustion of substance, and the word is employed because we are in want of a better one.

The metals are only the modifications of the substances just explained, and every one of them is produced by the simple operation of pressing.

No metal is discovered that was not produced by the compression of one of these substances, and the coarsest and most common of the metals were produced from the most common and least decomposed of these substances.

Gold, the most precious of the metals, is produced simply by a great pressure of particles of mica. Silver is constructed by the pressure of chalk. Copper, by the pressing of the mica partly decomposed, and the substance is but little different from gold. Iron is produced by pressing quartz and the undecomposed mica in it.

The other metals are only compressed chalk, pure or impure, or the productions from chalk, called barium strontium and

silicates of magnesia, oxide of magnesium, and several others, and which are only chalk in different degrees of decomposition. Every metal is constructed by pressing some substance to such an extent as to cause a change in the condition of the substance. The change in the condition is created only by a still further decomposition of the substance, and when the change is thus made the substance is solidified.

Now, if this statement is considered error will the denier explain why a considerable quantity of gold is found only in the interior of quartz that has contracted while cooling, and why every metal that is given a lustre by rubbing is also found only in a rock that is constructed by the same means.

The only way to construct gold is to press mica till it is partially decomposed. When this is done a piece of gold will be the result.

What a construction of gold there will be if this is true! It will be done, and it is our hope that all the precious metals will be constructed so fast that the greed for gold and silver will be satiated.

In the destruction of the value of such metals, a government can commence the work of obtaining sufficient credit to render its promises as good as gold. The absence of such a degree of credit is all that gives gold any value as money, and it is time that this most degrading monument of the want of governmental credit and relic of a barbarous appreciation of the character of civiliztion were destroyed.

It is only a mere continuation of a want of faith in the honesty and ability of human institutions that is realized in the substitution of the metals for the promises of the government.

All of the goverments of the earth are of such small importance in the estimation of the people that their promises of the character of money are only valuable when predicated on the possession of gold enough to convert the promise into gold when demanded.

If it is impossible to find an equivalent of this character the people will make sure of a government that will fulfill its promise.

Now, when any of the substances that have been described are sufficiently pressed to promote a small amount of change in their character, a metal is constructed. The pressure will produce a slight decomposition or burning of the substance, and at the same time render it more dense.

When the condition of the substance is thus changed it will possess a color corresponding to the degree of decomposition.

This is all that creates color in any object. Whatever the substance may be, its color is sure to describe its degree of decomposition. The chemical action of the substance is the cause of the color, and in every substance that is not transparent, there is a constant decomposing of its particles.

Every ore, no matter how bright its lustre, will gradually change its appearance, and become deprived of its brilliancy.

The brighest piece of gold is able to retain its lustre but a short time. No other metal can retain its lustre any more, and it is a fact that in the change of brilliancy only a decomposition of the substance takes place.

In each particle of the gold that is exposed to the atmosphere a combustion is produced that gives it its brilliancy, and when the combustion is sufficient to create a slight degree of decomposition of the surface the brilliancy is gone.

The lustre is but a burning of the metal, and there is no lustre unless there is a combustion.

Within the gold there is only a black condition of the metal, and gold will be black, or of any color, when a substance is mixed with it that prevents a combustion, and it is by this process that the different colors of gold are produced. No object is able to give the eye an appearance of color that is not capable of combustion when exposed to the atmosphere. The most of the substances are of this character. The only thing that can fail to produce color is the condensed electricity, that is not at all decomposed, and the cause of the transparency of any object is the undecomposed condition of this substance.

The atmosphere is as transparent as any object can be, that is not a pure condensation of electricity.

The mica is as perfectly transparent as anything can be when in a perfectly pure condition.

What a considerable addition to our knowledge of color and the condition of substances, if what is stated is correct.

The world has still to discover what causes a piece of charcoal to be black, and the dis-

covery shall be obtained in the sentence now to be given: Every particle of the coal is stopped giving the atmosphere a current of electricity.

A further decomposition is impossible without a greater action of the current of this influence on the coal.

Only a cessation of motion is causing the color called black on the surface of any object that is possessing this color. Every color, between black and transparency, is only a certain effect of a certain degree of decomposition. The colors are but effects of the decomposition, and with eyes that are covered with a very thick cornea only certain brilliancies of color can be observed.

The thickness of the cornea prevents the other kinds of lights affecting the nerve of the eye, as they do in other persons.

Now, let us commence the investigation of the disturbances that took place in the great shell of mica that constituted the earth's crust.

We have already stated that the current of the earth's electricity that is passing into the earth at the poles and coming out around the surface of the earth, wherever it is not closed by the absence of heat, has accomplished all the changes that have taken place in the crust of the world. Let us now ascertain if this statement cannot be verified in each particular of the changes that have taken place. If it is a fact that this current has done whatevever is capable of being seen, it is certain that it can be discovered and the actual character of the operations understood.

The crust of mica will be sure to be seen to have been operated upon in this sweep of this current, and the substances derived from its decomposition will also be found to have been still further operated upon, and it will also appear that in some places the mica has been thrown to the surface of the globe, and in different degrees of decomposition.

The position of this mica will be sure to disclose the fact that it was once in the earth, and that it lay beneath the substances that are observed in the crust and on the top of the earth. It will also appear that in its projection to the surface of the earth it was broken into pieces, and the scales as distinctly presented as the different layers and promonitories of the rock that were broken into pieces and thrown to the surface, or tipped up on their edges.

It will also appear that in the places where the mica is seen there is a considerable upheaval, and a great amount of other substances also thrown on to the surface.

This is already known, and the beds of mica are always found where the upheaval was so comparatively small that the volcanic character of rock was not created.

The only thing that produced an igneous rock was the heat generated in the outbursts of the volcanoes.

In all parts of the earth, where only a small range of mountains is created, more or less mica can be found, and on all the summits and slopes of the volcanic ranges; it is also found in the shape of quartz or silicon or felspar, and these different conditions of the substance are the result of the outbursts of such volcanoes. In all these species of rock or substances a small portion of the mica is still seen in the form of scales.

This condition of the substance will be again noticed when we explain the construction of granite.

The coral formations shall first receive our attention, for the first thing that was produced in the operations of the earth's development were these beginnings of organization. They were the commencement of continents as well, and were the constructions that began the division of the water of the earth.

From a mere coral or alga organization, all of the organizations of the earth, in the way of plants and animals, came into existence, and in the creation of continents only a great amount of corals was constructed.

In the separation of the water of the earth by coral creations we shall find the means for the dyking of continents, and all other bodies of land, by what are called mountain or hill ranges.

Only a division of the water of the earth was necessary in order to produce an inequality in the discharge of this great current of force that was calculated to do all the work of developing the earth.

As soon as a division of the water took place, and which would render the water deeper than before, a greater discharge of this current around the borders of all developing bodies of corals and land would take place, and the more forcible spurting of this

influence in such places would create a range of mountains of greater or lesser size.

The reason why the discharge would be more forcible in such borders of the coral creations and incipient continents was the prevention of the current being discharged through the water as easily as when it was shallow, or as easily as through the coral organizations and continents. The depth of the water was all the device for creating the greater force that was needed. When all this philosophy of the operations of our oceans and other great bodies of water, and of the vapor in the atmosphere is explained, a greater amount of startling facts will be disclosed than can be found in any department of scientific study except astronomy. In our article it shall receive this explanation.

No one can fail to comprehend it, and no author of science will deny it in any way.

It cannot be denied for the simple reason, that it can be seen to be true as easily as it can be seen what creates a heap of sand when it is dumped from a cart.

In all the effects of the water on the earth, and in the atmosphere, there is as plain an exhibition of the influence of this element on the currents of electricity connected with the earth as the effects of a body in striking another body, or of the effects of a stream of water in producing a sand bar.

These wonderful and important offices of water on the earth and in our atmosphere are the very work that is causing the influence that is developing the world to operate in a way to accomplish the unfoldment.

The people of this country are anxious to discover what can prevent the overflow of the banks of the great rivers of the country, and can control the great freshets that deluge the shores of such rivers, and what will enable the government to sufficiently dyke the shores of the ocean, and it will be a great accomplishment if it can be done. When it is seen what has created the bluffs on all such great rivers, and the greater bluffs on the shores of the oceans, it can be ascertained what will enable man to cause these bluffs to be constructed all along such banks or shores. The same process will take place that created what are now existing, whenever the stream is compelled to continue in one channel for a century.

Every bluff and range of mountains on the face of the earth was constructed by the crowding of the earth's electric current through the soil on the banks of the rivers or through the shores of continents or the borders of the oceans. Every grassy knoll or greater growth of grass or plants on the banks of streams, whether great or small, is the result of the diversion of the outflow of this current, produced by the water in the stream. Every additional growth of grass around a stone, or any object on a plat of grass, is the result of the inability of this current to discharge itself through the object on the plat.

Every atom of saltpetre found under an old building or in the bark of a tree is the condensation of this influence that could not pass into the atmosphere, as it could but for such obstructions.

Every piece of pasture will disclose the same philosophy by the increased growth of grass around the deposits of animals. It is not the work of the deposit. If it was, the brick that is producing the same result when laid on the grass plat would enrich the soil as well as the debris of the animal.

The cause of the growth around all such objects is not the fertilizing influence of the deposits, but it is the increased force of growth discharged around them.

A fertilizing substance does not accomplish growth except by its decomposition in the earth, and it is able to do so there merely by the decomposition increasing the amount of the current of the earth.

Every substance that is employed as a fertilizer will produce growth in proportion to its capacity for decomposition. When it is understood that only the cells of plant and animal substances are capable of giving the soil a greater force for constructing plants, it will be seen what will do the most to render soil productive. Lime or any substance is no exception to this truth for it is only the unburned cells of the coral that is decomposing in the ground. This vastly important fact is entirely unknown to the world, and it is entirely unknown how fertilizers produce the increase of growth.

When this statement is observed a whole catalogue of scientific theories can take their departure from the minds of the farmer.

The agriculturist can find all the fertilizers he needs in the plants that are not wanted for

consumption by his herds or his family, and it is only necessary to preserve the plants and their leaves by giving them a burial in the earth. Every plant can be made into a sort of glycerine, and it can be done by so decomposing it as only to separate the cells.

This is accomplished merely by covering them over with earth for a few weeks. When the decomposition is effected the best possible fertilizer is produced.

In the cells of plants there is a construction capable of rapid decomposition or combustion, and this is all the phenomenon that takes place in the operation of fertilizing the soil.

Only an increased force is produced for constructing a plant. If the fertilizing substance is capable of giving the plant a substance, what is it? Or what gives the substance a means of getting into the plant? And if this is the means of increasing the growth of a plant, what becomes of the old theory that the plant is grown by the absorption of substance through its boughs or foliage?

Let us drop this part of the subject here, and complete the description of the uses of water in controlling the operations of the earth's electric currents.

In the fall of the water that is evaporated from the earth, the very important philosophy of what is called lightning is to be seen. The lightning as we have stated is the effect of a concussion of electric currents.

The possibility of such concussions is created by the existence of vapor in the atmosphere. The cause of the concussion is the meeting of the current of electricity discharged by the earth with the one discharged by the sun. The cause of such a meeting of these currents in a cloud is only in the fact that the vapor arrests the outflow of the earth's current, and allows the current of the sun to meet the current of the earth in the cloud.

There is in this operation a mere transfer to the cloud of a portion of the conflict of the same great currents that is giving the earth its light and heat, and which is called the sun.

If the current of the earth is halted at a point between the earth and the point of its atmosphere, where a constant conflict takes place, a concussion of the same character will occur at such a point. It is only a creation of the same character of lightning, at the point of the halt of the earth's current, that is producing the object called the sun. Everything that produces a halt in the outflow of the electric current of the earth is a means for bringing a portion of the so-called sun to the object that arrests the current.

The operation is as simple as the union of any two bodies, and the union will occur at the halt of either body if the other continues to move toward it. Every object that was struck by lightning was capable of halting the current of the earth's electricity in its outflow, and, if there was anything in the way of the current of the sun that approached such object, it was rent or burned up.

Nothing on the earth can stop the approach of this current, if the object that halts the earth's current is able to completely check it. Whenever a halt of this character is made, a bolt of so called lightning is as certain to follow as the sun is to appear in the east in the morning.

The house, or barn, or field, or wood, or ocean, that is possessed of a substance that can stay the outflow of this current of the earth, will in every storm receive a visit of this great agent of creation from the parent plant of the solar system. The storm is able to assist in this visit, for a partial arrest of the current of the earth is produced by the vapor. In our country, a little less than a century ago, a great mind was constantly observing this wonderful operation of electricity. He could have no rest until it was discovered that the thing that was producing so much wonder in the cloud was the same influence that manifested itself on glass or amber when these substances were rubbed.

This giant mind accepted this conclusion, and he proved its truth by the experiment with the kite and cord.

In that experiment the conclusion was reached that in a storm a current of electricity was constantly passing to the earth. He did not see that it was only a small effect of stopping the outflow of the earth's current by the cloud, and the partial approach of the sun's current to the earth at some points. If this had been seen by him there would have been no recommendation of the contrivances called lightning rods. The only thing that can protect a building or any object from a visit by a current of electricity from the sun

is the absence of whatever can arrest the earth's electric current in its discharge toward the sun.

The lightning rod will only create a passage of the earth's current along its surface and render the top a pole of the current, This would, if extensive enough, produce a constant concussion of currents of the earth and sun at this point.

A chance to discover this fact is often obtained in such instruments. No building or person's life was ever saved by the lightning rod.

This greater discovery than the accomplishment of the old patriot of the days of the Revolution will receive no acknowledgment from the scientific world, nor a reward from any government, but it will be accepted in a short time in every household of the world.

It cannot be kept out, and no lightning rod is necessary to confirm it.

Now, let us ask the reader to observe that in what has been stated, although in all the wide world a different idea is accepted in reference to the character of the sun, that in every flash of lightning you have seen, and in every peal of thunder you have heard there has been witnessed an effect of the coming in contact of the currents of electricity of the earth and sun.

The thunder of the storm, as it jars the earth and shakes a window, and which so frequently arouses you from sleep, proclaims the great truth—that, in the circuit of our world around the sun, only a comparatively small scope of the earth's influence is possible, and that all around the globe there is a great sweep of a force that is performing all the work of the rotation and revolution of this grand body.

A voice, in thunder tones, calls on you to witness that in every phenomenon of the Heavens a great and ever present influence is performing the calculations of the Creator. This boom of the thunder is an unmistakble proclamation that in the great planet that is occupying the centre of the system of worlds there are means for commanding the attention of the people of the earth.

This attention is obtained, and it will continue to be given until the whole plan of creation is understood.

In the next chapter a further examination of the effects of water on the current of the earth's electricity will be made, and a considerable progress in the description of the conversion of a shell of mica into what the earth possesses.

Chapter III.

The water in the atmosphere is accomplishing other wonders of vast and important significance, which shall be here described.

The operations of the vapor which are supposed to be giving us our storms are only part of the methods for watering the soil. It is supposed that the fall of rain is always due to a condensation of vapor by cold.

It is not believed that any other influence than cold produces a fall of the water, and it is in all cases supposed to be a cold wind or stratum of cold atmosphere.

All thunder storms are produced by concussions of the atmosphere, and the condensation of the vapor is due to the concussions created by the conflict of the electric current of the earth and sun.

We have already described the character of this conflict, and it is only necessary to give an explanation of the way the conflict produces a fall of rain in a storm that is accompanied by thunder and flashes of lightning. In the mass of vapor that is borne into the atmosphere in a hot period there is such a great quantity of water as to cause an obstruction to the outflow of the earth's electric current, and the result is a meeting of the currents of the earth and the sun in this vapor. It is only necessary that a great amount of vapor should exist in the atmosphere to cause the production of what is called lightning. Every season will afford this phenomenon to some extent, and it is only because there is not so much vapor in the atmosphere in the winter as in summer, that there is not so much lightning in the winter.

Let us again ask our readers to pay particular attention to what is to be stated. The whole philosophy of the thunder storm shall be given, and in another season all who care to see a most astonishing clashing of the currents of electricity of the earth and sun can do so, with an understanding of what is actually taking place.

Every flash of lightning is a result of the meeting of these currents, and all who have seen this phenomenon have actually seen a

work created by the conflict of these currents, and a consequence of the power of the sun to extend its co-operation to our earth, and assist in producing rain when there is no cold wind to perform the office. What a glorious discovery if this is a fact! It is a fact, and before we are through describing the influence of the water on the earth, it will be seen to be true, and so plainly, that every reader can understand it as well as he can understand why the meeting of any two bodies that are in motion will create a concussion.

Now, the concussion of these opposite coursing currents will accomplish the production of rain, and perform the work of a cold wind.

The concussion of the atmosphere by these opposing currents will create a movement of the atmosphere in all respects the same as wind.

The air is quickly pushed in all directions from the place of concussion, as it is when a cannon is exploded. The quick motion of the atmosphere annihilates the vibratory motion of the air that constitutes its heat. Only a vibration of the atmosphere is producing its heat and the vapor in it, and it is only necessary to destroy this vibratory motion, in order to permit the vapor to condense.

It is this vibratory motion that produces all the evaporation of the water, and if it was not overcome by a wind or a concussion the vapor, would never return to the earth.

In each thunder storm this effect of concussions can be seen. A thunder storm is only a condensation, and fall of vapor,—the effects of these concussions,—and the clouds are created no faster than the concussions are capable of accomplishing the condensation.

The most astonishing of the evidence of this fact is the appearance of the approaching storm, and the more copious descent of rain immediately after a flash of lightning and its peal of thunder.

In the approaching clouds of the storm there is a perfect portraying of the character and extent of the concussion of the atmosphere by a lightning stroke.

The so-called thunder head is but a cloud of the vapor condensed by a clash of the currents of electricity at one conflict, and the shape and billows of the cloud actually delineate the extent and direction of the motion of the atmosphere produced by such a concussion. How degrading does the knowledge of the scientific masses concerning such wonders seem, when we contemplate that for the whole period of man's existence, this exhibition of a design of the Almighty has been in sight without the slightest perception of its character being obtained, and even when this disclosure of the affair is given the world, the whole body of fashionable scientists will ignore the work, and hope that it will drop out of the minds of the people. Their desire to inform the community of the affairs of nature is so controlled by their pride and selfishness that they would prefer that every truth of nature be forever concealed, than that one of the facts of creation should be given the world by a person not endorsed by them, or in any way that will give the truth to the people without their being credited with it. It is our desire that this very portion of this article be handed to the so-called scientists by our readers, and that a demand be made at the same time for an acknowledgment or denial of what is stated.

No such author in the country will for a moment dare to deny it in a way to have his denial made public, and there is not one in the country who has character and mind enough to admit it if told what it is.

Now we will disclose another great work that the water is performing on the surface of the globe, and we ask the most careful attention to what is here to be stated.

The great oceans, and in some degree all the bodies of water on the earth are performing a work identically like that performed by the vapor on the earth's current.

The water of the oceans of a certain depth will constantly prevent this great current of the earth being discharged into the atmosphere.

The other portions of such bodies of water, and all bodies of this element will prevent the discharge of the current in proportion to their depth, and the difference in the outflow of the current will always correspond to the depth of the water. What a curious control of the discharge of this current!

We shall presently see how important it is.

Now we have stated that the object that lights and heats the earth, and which we call the sun, is a mere conflict of the earth's

great current of electricity with the current of the sun, and on the side of the earth presented to the sun. A mere electric light.

If this is a fact it will be very certain that this conflict will be affected by the inequality of the discharge of the earth's current. The current of the earth is the counteracting influence in the production of this sheen of lightning in the sky. This great illumination, called the sun, is always dotted by what are called spots, and their character and cause are problems that are to-day and have been for centuries agitating the minds of astronomers. What will the world want of the teachings of this class of authors if it can be shown that every spot on this so-called sun is only a hole through this sheen of lightning?

It is going to be shown, and it is as capable of demonstration as the operation of a problem in multiplication.

From every point of the earth there can be seen a spot on this great construction of light, and it will appear as near the shape of one of the oceans of the globe as the map of one in any atlas, and in fact it will be a more perfect map of such ocean. The ocean that is thus mapped will be the one on the shore or over of which the observer stands. Any cloudless day will enable such observer to look quite through the great "ball of fire' our astronomers are making such calculations upon. In this mapping of the oceans there is nothing more than a partial extinguishment of the light and in the picture of the ocean created in this flame of lightning every current of the water, and every difference in its depth, and every great sweep of the atmospheric currents over it will be portrayed in the aspect of the picture.

What a daring assertion this is, if it is untrue; what a glorious revelation of one of the affairs of nature, if it is true! No one need to be in doubt about its being true, for it can be established by a comparison of such spots with the maps of the oceans and other great bodies of water, and we ask all who see this work to compare these objects, Every considerable body of water on the earth will be pictured on this old sky light, and the character of the spot will correspond to the shape and depth of the water. Any object between this light and the sun will have the same effect as the object on the earth or in its atmosphere has upon it, and all the time and money and glory that have been wasted upon astronomers, by their attempts to discover the distance to the sun by a transit of Venus has been bestowed on the effort to watch the creation of a hole through a common electric light in the earth's atmosphere, and there is not an astronomer on earth that is able to see that the transit of Venus, so called, is only a slight extinguishment of this electric light by the interception of the sun's electric current by a world about the size of our own.

Give this great fact your careful consideration, and do not be deceived by any production of the scientists concerning this affair.

Now a word of further disclosure of what a great ocean can do in controlling the character of the operations of the current of the earth in respect to atmospheric phenomona.

In every ocean at its greatest depth there is a constant pouring of the current of electricity sent to it by the sun. This current is the thing that will create the tides of the ocean that are attributed to the sun, and the creation of all the sparks and illuminations on the masts of vessels is the work of this descending current.

The St. Elmo's fire is an example of the creation of an electric light by a current of electricity from the sun. Every object on earth will disclose the fact that its substance discharges a current of this influence when it is in the atmosphere where a current of the sun's influence can strike it. In this exhibition of the creation of a conflict between the electric currents of the sun and anybody on the earth that the current of the sun can reach there can be seen a particular illustration of the philosophy of lighting and heating the stellar bodies. The same operation precisely is giving us a view of the position and size and motions of the planets and moon and stars. The illumination created on the side of each of these bodies that is presented to the sun is all that we have seen or ever can see of the planets, moon or stars.

The character of such illuminations is in all respects the same as that of the arc light in the electric lamps, and these lights are created only by the striking of the currents of such bodies by a current from the sun.

In the case of the planets and moons, the current of such bodies are discharged so forcibly as to cause the conflict to take place

at a considerable distance from their surfaces. The moon is disclosing its condition of surface to the people of the earth every time it is full, and the patches of dark shades, and a few black dots are only the effects of the moon's oceans on the electric light that is created on the side of this body presented to the sun, and they are in every particular the same kind of spots as are seen on the earth's electric light called the sun.

Every phenomenon of our so-called sun spots is seen on the moon's great shining atlas of light. Now if we are correct in this description of the creation of light and heat for the planets and moons, is it not rational to claim that the lesser objects of the sky called stars are given their light in the same way? How can they obtain their glory if it is not created by a current of the sun?

If the sun is but a planet in all respects like the earth, only greater, on what ground are we to assume that these stars are great worlds of ignited substance a great distance away? This theory as to their condition is predicated upon the monstrous absurdity that the sun is a great world of only ignited substance, and that the object that is so faithfully lighting and warming our globe is the mass of ignited matter.

If this is only absurdity, on what foundation does the claim rest, that a star is a world of this kind?

This whole accumulation of preposterous argument is as foolish and false as the prophecy of the destruction of the world made by an excited and uninformed bigot of a class of worshippers.

This is all that we can state in this article concerning the operations of the earth's current of electricity in connection with the other bodies of the solar system. All of the evidence of the truth of our statements will be seen when we have discussed the creation and philosophy of the solar organization.

Another most interesting accomplishment of the current of our globe in its passage through the atmosphere shall receive our attention. The very beautiful phenomenon called mirage.

This wonderful description of the surface of the earth painted on the stratum of atmosphere above it, is a splendid indication of the fairy land where angels are supposed to dwell, and in this faultless sweep of electrical plating there is a chance to discover what is only a copy of a spirit world.

All such pictures of the surface of the earth and objects on it are but a species of photographing, in all respects like the photographing of our own faces, on a current of the plate in a camera. The current discharged by the earth, will imprint on a stratum of atmosphere the forms of objects from which it is discharged, and as in the case of photographing the features of the objects are produced in the copy only by an inequality of the current, and the inequality of the current is produced by the difference in the rapidity of the discharge from the different objects.

When a mirage is seen in the sky above the clouds or over the deepest portions of an ocean a picture is obtained of a portion of the surface of the moon and of objects on it.

This good friend of our earth is capable of giving us a chance to see what progress it has made in the years it has traveled around us.

Now it is a great pity that the whole scientific world is not able to give an explanation of the beautiful and glorious operations of the means of creating a home for their souls. As sure as the existence of the world, the current of electricity that is stamping a stratum of atmosphere with a picture of the earth's surface, is carrying to a higher stratum the emanations of the earth and constructing a cavalcade of such objects quite around the planet. The fauna of land and sea, the flora of the continents and borders of the oceans, the hill and valley, the mountain and river, the plain and forest, are all sending their souls to this cavalcade of the creations of the spirit globe, and they are lifted to their places by the great current of development that is converting all the earth into a garden like the Eden of the Bible.

On this work of the triumph of creation the human soul is to find its abode.

The same current of the earth that carries the emanations of the plant and forest and mountain to its resting place in the arch of this elysian field, is carrying the soul to its resting place on the surface of this sphere.

What a triumph of the affairs of creation! What a construction by the Being whose palm is on the tiny insect, and on the world that is being converted into a grand cavalcade of what is termed in the scriptures the New Jeruselem.

If our authors of science could behold a single operation of the force of creation, or a single method of its operations, they would not content themselves with anything less than a perfect conception of this final and satisfactory conclusion of the development of the globe.

All of our churches are trying to convince their devotees and others, that in the sky somewhere, there is a place called heaven, and that it consists of gold and precious stones and rubies, and all that delights the eye and senses of a perfect soul, and they are also trying to get all persons to consider the importance of obtaining a home in this beautiful place.

They are confident that in another corner of the sky there is a dreadful place of destruction, and that it is filled with the discarded creatures who are unworthy a home in the other place.

This very class of teachers are pronouncing anathemas on all who shall or can describe the place they are so confident is existing. They want the explanation of it left to the church, and a fearful damnation is in their opinion to follow the disclosure of the evidence of the fact that a world of this character is actually existing.

In the article we are penning the Church can obtain an explanation of the world they are so confident was created by their Creator. The very construction of this world can be as well explained as the building of a house.

A complete description of all such creations as are employed in the construction of this abode of the soul can be found in our article on the origin of species. It is never to be denied.

Now we can return to the work of describing the operations of the globe itself, and in the further operations produced by the water on it. We shall find that still other wonderful and important uses are made of this element of the earth.

No continent could have been produced in a condition to have performed what the continents have performed, and still are performing, without the co-operation of the waters of the earth.

This will be seen as we proceed.

Every continent and island is a creation of one or more coral atolls, and in their creation the water of the earth has performed an indispensable office Every construction of what is termed the land of the earth is and has been only a coral creation, given borders of the character of mountains.

On all the continents of the globe several perfect copies of the common coral atoll can be found, and the several atolls of such bodies of land and their lagoons constitute such continents. Let the reader obtain a map of a coral atoll, and become familiar with its character, and when this is done only a glance at the general maps of the great continents of the world will be necessary to satisfy him that a continent is made up of several atolls, some of them great ones, of the same character as the small ones pictured on the atlas.

Every atoll that was ever created is in existence to-day, and capable of being seen. This commencement of a continent is only a considerable growth of corals in one locality and given a fringe of small mountains by the discharge of the current of the earth through its borders to a greater extent than at other parts of the corals. The greater discharge of this force around the coral organizations is caused only by the greater depth of the water around the mass, and the inability of the current to escape from the earth under the water as easily as at the shore. All that is necessary to establish a continent is the continuation of this growth of the coral organizations. As fast as the coral mass becomes more extensive, the water of the ocean becomes deeper and the discharge of the earth's current through the border of the increased atoll becomes more violent. The consequence is the creation of greater mountains or hills around the coral construction.

Now when this growing continent becomes still greater the work of constructing dikes to protect what is already created is repeated, and it has only to be repeated a few times to develop continents like what are now existing in several parts of the globe.

On every one of these continents there are to-day the plainest outlines of all the atolls, small and great, that were created in the growth of the continent. Nothing has prevented their continuance in their original condition but the wear of storms, and the constant decomposition of their material by the electric current that is and ever was passing from the interior to the surface of the earth. Even with these agencies constantly

wearing down all elevations of such portions of the land, every atoll that was ever created is still so manifest that it can be traced by any one in whose locality it exists, who will carefully read and remember what is here stated. Let us ask the careful attention of the reader to what is in this connection to be stated.

The proposition to be advanced will be of such importance to the investigator that it will never be forgotten if understood.

On every little hill around your dwelling, and on every mountain you can behold there is a wonderful object you have never observed, and one that no scientist has ever discovered, or ever will discover, unless it is pointed out to him. This wonderful object is the amount of soil that is seen, and which was constructed entirely by the decomposing influence of the current of electricity the earth is discharging, and in this soil there is nothing but decomposed corals. If the hill is covered with trees, you behold great corals only more developed, and if the hill is only exhibiting rock, you behold a mass of hardened coral that was only enough decomposed to become a mass of pulverized atoll fringe. The whole hill is but the small mountain that was created at one point of the little range that constituted the atoll barricade. Let this state ment be remembered, and let your children be taught that on the band of hills that girdle a city or town, or perchance only a farm, there is a work of the Almighty that was intended to give the city a good locality or the farm a good condition of soil. Let us ask the reader also to remember that in this small elevation of the earth's crust a creation is seen vastly older than the great mountain whose shadow is daily sweeping over the plain and hill, and whose crest is shining with the mica of the crust of the globe.

What a strange proposition this is, after centuries of different teaching!

What a great disclosure of the construction of our hills and mountains if what is stated is true; what a commencement of the investigation of the problems of geology! It is a mere commencement, and it is to be followed by equally astonishing developments concerning the good old world on whose back we are created.

Let us advance a little further in the discoveries of the character and construction of this wonderful world.

In the interior of every hill, no matter how small the hill may be, there is a cavern as great as the hill itself. No upheaval of the crust of the earth ever took place that did not create a cavern under it as great as the amount of the elevation above the earth's surface. In every such upheaval there was a volcano, in all respects like the volcano of Catopaxi or Tenneriffe. Every cavern in such upheavals will show the same character of volcanic action, and the difference between them and the great crater of old and fearful Vesuvius is merely in the extent of the burning or decomposition of the surface of the caverns.

Whenever a hill is opened to the depth of its base a crater is sure to be found. The depth of the crater is the extent or distance to the center of the earth. The cave of the hill in Kentucky and those of such a character in any part of the globe are unfathomable, and so are all the craters of the earth.

A person can descend any one of them until the atmosphere is absent and only a current of electricity is present, and if it were possible to descend far enough the body would be actually suspended in this out-flowing current of the earth.

In the ocean where the water is a mere aggregation of the gases that constitute it, a ball will not be allowed to sink or be allowed to move in any direction. The stars are suspended in their elevations where there is no motion of a current of electricity except in the direction they are moving.

The explanation of the crater in which stars are poised will be given in our article on the affairs of astronomy. An occasional reference to the analogies of creation is made as we proceed, in order to prepare the reader's mind for what is to follow.

Now a very good understanding of the creation of hills and mountains can be obtained from what we have thus far stated. We repeat that in all parts of the globe a coral atoll can be seen, from the size of the small atoll that is giving the capital of our country a quiet and cosey place, and surrounding it with a fringe of small hills decorated with corals in the form of trees, to the great atoll that consists of the valley of the Mississippi and the mountains that are on its borders, or the still greater atolls that comprise empires like China or India, and the mountains surrounding each of them. A

most perfect atoll is seen in the basin of Europe, in which old Hungary is so quietly accepting the condition of the affairs of the continent. France and Spain are atolls of great size.

Siberia is almost wholly an atoll. Old England is a particularly fine atoll, and its fringe is so white on two sides that it is converted into the white dishes that adorn our tables. It contains many small ones. Switzerland has a couple of splendid atolls and old Italy possesses three. Greece is capable of disclosing about a dozen small ones. All Russia is a great atoll containing small ones. Persia is another, Arabia is another, and Africa has two vast atolls, and they are soon to be converted into farms and grain raising countries.

Our continent is capable of exhibiting a considerable number of atolls. The great Mississippi Valley is the largest. The valley drained by the McKenzie River is next the largest. The valley drained by the St. Lawrence is the next, that of the Ohio is next, and the long atoll on the east of the Blue Ridge is next.

On the west side of the Rocky Mountains there is a furrowed atoll stretching from these mountains to the Sierras Navada. This great atoll is a magnificent illustration of what has been stated of the construction of mountains, and it has only to be seen to give the reader a means of discovering what a great ocean can cause on the shore of a great continent.

The different furrows of the continent that constitute the side ranges of the Rocky Mountains are as convincing illustrations of the way a great body of water will cause a current of the earth to create a range of mountains, as could be found in a sight of the upheavals. The ranges on each side of the Alleghanies are equally good illustrations of the power of a current of electricity to push up the crust of the earth when it is compelled to spurt out at the border of a continent.

All the great ranges of mountains of the globe are supplemented by additional ranges between them and the oceans to a greater or less extent, and where there has not been a considerable creation of the additional ranges there is sure to be heard and felt the groans and yawnings of the current that accomplished the constructing of all mountains.

In each great range of the earth a perpetual chimney is created for the escape of the current of electricity that is incapable of coming up through the oceans, and as sure as the ranges are on the borders of continents, and are not supplemented by other upheavals or similar good chimneys for the escape of this current, there will be frequent earthquakes and volcanoes, and this condition of affairs can be seen in each of such places.

On the western shores of South America, where the coast is only a base of a mountain, and the range the only one on the continent, except a few supplementary short ranges on the eastern and north-eastern coast, there is an almost constant attempt of this earth's current to create another range of mountains such as is seen in the ranges on the sides of the Alleghany and Rocky Mountains. This muttering and growling of this force all along this coast is merely the pressing of the current out of the earth, where it can get out more easily than it can through the waters of the Pacific,—the mere effect of the suppression of its discharge by the vast ocean on the western side of the continent.

In every quarter of the globe a similar effect of the suppression of the discharge of this current by water of oceans and seas can be seen, and in every instance of its exhibition, an amount of work of this diverted discharge of the current will correspond to the degree of suppression, or extent of water influencing its discharge.

On all the continents there is a wonderful amount of evidence of the truth of our statement, and in each extinct, as well as in each active volcano, there is a portion of this evidence.

In the old Mediterranean there are two frequently active volcanoes that are informing the world (in connection with this paper) of greater wonders than the burial of Pompeii and Herculaneum. On the island of Sicily, and on the more northern island of the Liparis there are actual electric valves so constructed as to allow an escape of the current of the earth under the Mediterranean, and in a way to give these craters an alternate discharge of this force. In the construction of these valves there is a chance to discover what created the sea that is so deep

and so well caclulated to furnish an anchorage for the fleets of the world.

In the great depth of the water of this sea there is all the cause of the great volcanoes of the islands and on the peninsular of Italy, and the depth of the water is due to the fact that it is the channel or gorge between two continents that the sea occupies.

The channel was constructed by the development of the continents of Europe and Africa.

In the crust of the earth beneath this sea there is a convergence of the slopes of these continents. This fact is apparent not only from the character of the coasts of the continents, but from the cessation of the outflow of the electric current in only one of these volcanoes when the other is active.

This remarkable phenomenon was noticed by Humbolt, and it gave him the suspicion that electricity was concerned with the volcanic action.

The reason why the outflow of this current is alternate from these valves of the sea, is the fact that in the discharge of this influence from these craters, there is a circuit of the current produced, and it is the current of outflow from one passing into the other.

This action of the current is witnessed in the cessation of outflow in one while the other is active. The most convincing proof of this action, however, is in the construction of a great aurora over the top of one of the mountains or volcanoes when it is inactive, and the creation of a slight amount of illumination from the top of one volcano to the top of the other.

These phenomena have been seen by the people in the vicinity. What a confirmation of the fact that a current of electricity only, is creating all commotions of the earth's crust.

Now, in the great volcanoe of Vesuvius, there is a still greater surprise for the geologist.

This old and scarred outlet of the current from under the Mediterranean is capable of confounding the wisdom of all the geologists of the world and giving them the overwhelming evidence of a current of electricity coursing out its crater every time the waters of the Mediterranean are sufficiently chilled. On the slopes of this great mountain there is a decomposing crust of the lava that has been thrown out the mountain.

Wherever a soil has been created, it is covered with vines. Now, when the volcano is inactive the growth of these plants is luxuriant, and in all the years of the inactivity of the volcano this is seen, but when the volcano is active, and for some time afterwards the plants are withered and cease to grow, and do not commence again to unfold till some considerable period after this outpouring of the force of their construction from the sides of the mountain has begun.

This inability of the plant to grow is produced by the current of electricity of the earth being attracted to the great current that is passing out of the mountain's crater. The whole slope of the mountain will exhibit the want of this current in this manner. The small animals will perish, and the so-called carbonic acid gas will envelope the mountain.

It is only atmospheric gases, without the usual current of electricity.

In nearly every eruption of this old chimney of the continent of Europe a considerable creation of lava has occurred. This molten condition of the interior slopes of the mountain is produced merely by the decomposition of the crust of the volcano by the out-rushing current of electricity, and it is as simple a burning of substance by a current of electricity as is ever seen in any substance.

In this melting of rock and creation of lava there is a whole volume of evidence of all that we are stating concerning the causes of the commotions of the crust of the earth. It is a fact, that in volcanoes that are only a small elevation above the sea no melted condition of substance is thrown out, and that from all volcanoes of great height there is a flow of this condition of matter. One would suppose, if this is true, that a century of geological investigators could have discovered that the force that was operating to create the eruption was the force that was melting the substance, for only a few hundred feet more extension of sweep of this force in some volcanoes than in others was all that enabled the current to accomplish the melting of substance. No one is going to deny this statement after they have discovered that only high volcanoes discharge what is called lava.

When it is seen to be a fact, will the observer ask the geologist of his acquaintance what excuse geologists have for not noticing that lava was and is impossible in a volcano

of no considerable height? What do our readers suppose we can possess in the nature of admiration for a world of geologists who could not in a century have discovered that only a long flue in a volcano was necessary to create a mass of lava, and when all such teachers have claimed and continue to claim that the lava is the best possible evidence of an ignited or molten condition of substance in the earth's interior? Will our readers, if they find what we have stated is true, try and allow the overthrow of this most stupid old theory to become as extensively known as possible? We desire all the assistance our readers can give us in doing away with the miserable errors and worthless teachings of the scientific classes. The false hypothesis just disposed of is only a sample of a world of errors, and all of which are as easily overthrown. Let us ask that in every household where this paper is read, that a catalogue be kept of the theories of scientists that are shown to be error since our paper was started and during the discussions of the principal departments of science, and when we are through discussing the essential subjects of nature let it be seen how many theories are left that are able to stand.

Now, we can close what we intended to state concerning the operations of the earth's current of electricity that are influenced by water when we give a synopsis of the condition and localities of the volcanoes of the earth and a description of an earthquake.

It is our wish that in giving this information a class of thinkers somewhere will consider the statements and give them a wider publicity if they are found to be correct.

No time should be lost in disseminating the glorious truths of nature and the understanding of a Creator's work. Only if it be a fact that is stated, and so plainly seen that there is no chance for a mistake, do we desire that the reader may advance the understanding of the truth.

In all the volcanoes on the earth whether active or extinct, there has never been any decomposition of the interior of the elevation, except where the mountain has been at least a thousand feet above the level of the sea, and in every case of the decomposition of the crust of the volcano there has been only a burning of the surface of the crater. We mean the interior of the mountain.

Every particle of the substance thrown out of a volcano has been only such substance as the crust of the earth is composed of and in a solid or liquid or gaseous condition. The mica of the earths crust is always thrown out in the eruption, in scales, and it is never melted. It is always seen in the substance of the eruption as it is seen in the stove door.

The impossibility of melting the mica in the period of an eruption is the cause of the appearance of the mica in its crystalized or scaly condition.

Now, where did this mica come from, and why is it always thrown out of a volcano? Is it not merely a part of the crust of the globe, and was not the crust mica?

Let us finish the work of pointing out the influence of water in the creation of volcanoes and earthquakes.

On every island of any considerable size a volcano is still burning. The cause is as capable of detection as the volcano itself, and it consists of the fact that all such islands are surrounded by a deep and great extent of water. Nothing is causing the outbursts of these volcanoes but the suppression of the discharge of the earths current by the great depth of water around the islands.

The continents with one exception are possessed of no volcanoes that are not on the shores of these bodies of land, and with this exception there is not one in action more than eighty miles from a deep body of water and not more than a half a dozen that are as far from the water as fifty miles. In Asia there are two volcanoes in a branch of the Himilayas that emit a small amount of gases and smoke. Jorullo, in Mexico, is the greatest distance from the water of any very active volcano, and this is due to the co-operation of a great body of water on both sides of the belt of the continent on which the volcano exists. Its action is not constant. Let our readers observe these statements and examine their atlases for their confirmation.

Look at the Sandwich Islands and their volcanoes, at Iceland and its volcanic efforts, at the Peak of Tinneriffe, the volcanoes of the East Indies, the volcanoes in the Mediterranean, and on the coast of South America. No person can observe these phenomena and their proximity to the water and doubt that in all instances they are produced in the way we have stated. All of the extinct volcanoes are equally good evidence of this truth, for they are all located at a

great distance from the present confines of the oceans, or are silent merely because there are so many craters around them and so much land, that the force can escape as easily as through a sieve.

Wherever there is a great number of ranges of mountains, although on a coast of the continent, there are no active volcanoes, as they are called. Let the reader glance at the western coast of North America, the northern coast of South America, and eastern coast of the United States, and at the character of the mountains of Africa. All that creates this difference between them and active volcanoes is the fact that through the crevices of all these mountains the current can escape so readily it cannot create any violent decomposition of their crusts. In each of the greatest ranges of mountains of every continent there are extinct volcanoes, and they were all active when the oceans extended to their bases.

A few comments on earthquakes and we can dismiss the consideration of the causes of the disturbances of the crust of the earth.

In our next number a careful consideration of the causes of these uncomfortable commotions will be given. A surprising character of facts concerning them will be disclosed. It will be possible to acquaint the reader with all the causes of such phenomena, and convince him that we are correct.

When this task is completed, an explanation will be given of the curious affairs called geysers, and it shall be seen why they are in the same places as volcanoes and why they are intermittent.

Following this part of our work will be a discussion of the ocean currents and tides.

It is an unpretentious promise to state in this place that these movements of the water of the earth will be as plainly and easily described and their cause as easily given as an explanation of a washing machine.

When this is done we will allow the subscribers of this paper to decide whether we are correct.

Chapter IV.

An earthquake is a sudden rush of electricity out of the ground. Every phenomenon of the character of an earthquake will confirm this statement. The wave of the ground or water that is often observed is but a construction of an elevation at one point of the ground or water at a time, and it is caused by the unequal discharge of the current. The rising of the ground is merely the effect of a current of electricity coming out of the earth at a greater velocity than usual. In every hour of the day and night where the earth is open—as it is wherever vegetation is growing to any extent—the current that is so often causing the ground to heave and swell, and sometimes sink, is coming out of the earth, and the only thing that will enable the current to perform what is termed an earthquake is an unusual suppression of this outflow. No earthquake can occur unless the current that is all the while coming out of the ground is prevented coming out for a short time, or a suppression of its outflow in one locality causes its discharge faster than usual at a point adjoining the place where the suppression occurs. In either case the result is a commotion in the surface of the earth. So perfectly plain is this cause of earthquakes that their occurrence can be calculated as easily as the dawn of day.

There are only three changes in the condition of the earth's surface that can produce an earthquake, and when either takes place, or if they happen at the same time, an earthquake is as sure to follow as the sun is to pass below the horizon every day. These changes are the chilling of the waters of the ocean or great seas or lakes, the great storms that deluge the ground with water over a considerable area, and the closing of the pores of the earth by the cold.

Whenever one of these affairs has occurred an earthquake has followed. Sometimes two or all these causes occur at the same time.

When the chilling of the water and deluging the land occur by the same storm a violent earthquake is produced. If but one of these causes of the commotion occurs at a time the earthquake will be barely perceptible.

No earthquake ever occurred on the surface of our globe unless a great rain had covered the earth with water over a great extent of its surface, or the winds from the north or from a northeastern or northwestern direction had chilled the surface of the ocean, sea or great lakes, or the autumnal season had closed the surface of the earth by cold for a considerable distance toward the equator. Therefore, an earthquake of some extent may

be expected, and with certainty of coming after either of these changes occur.

Every season is sure to verify this statement by the earthquakes in one of the hemispheres of the earth in such period.

The greater convulsions on the western coast of South America and on the coast of California are produced in the same way, and the difference in their violence is only on account of the difference in the extent of water on one side of these countries, and in the opportunities for the escape of the current.

The earthquakes of the Atlantic coast follow a long continued gale from the northeast, and if the gale is accompanied by rain the shock will be quite severe. The earthquakes in the great plain between the Allegheny and Rocky Mountains are produced by the contraction of the earth caused by cold approaching from the north, and they are rarely if ever known except in the fall of the year. The chilling of the waters of the great lakes assist in causing these earthquakes.

Now, if what is just stated is correct, can we not ascertain when an earthquake will occur in any part of a continent?

Everything that is stated can be found to be true by observing the localities of the earthquakes that occur during the year, and noting at the same time the character of the storms, and the periods of the year when they occur. The accelerated outflow of the earth's current produced by the causes mentioned, will manifest its greater volume by charging every conductor of electricity over the surface of the country where this flow is augmented. This is often done to some extent when no earthquake is appreciable.

Cannot one of the whole body of telegraphers ascertain what causes their wires to become so charged with electricity by a natural process that a battery is unnecessary? They are all taught that this great agent of all wonders is only a peculiarity of motion of the molecules of their wires, and every telegrapher in the country accepts this silly and worse than useless theory of the character of electricity. It is a great misfortune that a mere *ipsi dixit* of a person of only great conceit is able to delude a whole class of practical minds. It is actually the case that this most stupid offering of a man as bigoted as a Jewish rabbi is preventing the whole of the worlds electrician's from discovering anything concerning the nature of electricity. A vast amount of such stuff must be got rid of before any understanding of nature can be obtained.

In our contemplation of the offices of electricity in any of the works of creation we can discover only a very subtle influence capable of passing through any other substance to some extent, and capable of decomposing any other substance. It is calculated to give substances the character of organization, and it is always done when the substance is capable of organic operations. It will accomplish the development of any object or organization in nature, and it has always done this work. It is capable of destroying all objects and organizations, and it is the only thing that does.

In all the operations of the earth there is only a coursing of a current of this influence. The coursing is as constant as the rotation of the earth.

In all the constructing on the earth's surface there has been but an escape of this current from out the earth that has performed the work, and the construction of every organization of the character coral, algæ, zoophyte or plant of the land is the evidence of its work, as much as the upheavals of the earth's crust.

In each of these organizations there is a process of development that is in matter of wisdom and competency the climax of method; and it is a process of which there has never been, and is not now, the slightest understanding on the part of the scientific world. In the pamphlet we have published on the offices of electricity in the growth of plants this method of unfoldment is wholly explained; and if the work had come from the pen of any noted author of fashionable science the world would not have recovered from its astonishment in a period of a generation. It is only a few of our patrons and readers who are in possession of the knowledge, and in every college and institution where science is taught or studied this work has been examined and the contents placed in the minds of the readers, and the most ardent hope created that the world will not allow it to be made note of until it appears as the work of one of the popular teachers of science.

It is our wish that all who read this chapter will acquaint themselves with the character of that work. In it can be found the cause of plant species, and the cause of their distribu-

tion over the earth, and the process of unfoldment of every species of plant. We challenge the greatest possible investigation of the article, and also a denial of any proposition in it. Not a college, nor any teaher of science in the country will accept the challenge, and for no reason except that they dare not.

We are as safe in our challenge as the divine arrangement for creating plants is against a mere foolish theory of an unwise teacher.

We have referred to the subject of plant development in order to afford an understanding of the development of corals, which we have stated was the commencement of the creation of continents, and it is a duty before departing from the description of the character of continents to describe the manner of growth of the coral. We employ the word growth because it is a fact that a coral grows in the same way every plant, or animal or human organization grows.

There is but one method for producing growth, and there is no necessity for more.

The common explanation of the growth of corals is that a great mass of insects, called polypi, are depositing a calcarious substance in the coral constructions and creating additional size of the coral by this deposit, and that the coral branches and variety of forms are consequent upon the way the coral insect is made to deposit this substance by the force of waves and tides.

In every school of the world this folly is taught and believed, and every scientist on earth is willing to accept this childish and absurd description of the growth of corals. No attempt is made to explain the origin or construction of the polypi, or their means of getting millions of cubic miles of calcarious substance, or of the means possessed by the polypi for bestowing the substance to the coral, or connecting the coral to the crust of the earth.

The only thing necessary to be stated to overthrow the whole of the foolish stuff taught concerning these organizations is to disclose the method of plant unfoldment. Although such explanation has been given in the columns of this paper the propriety of its being given here will be seen.

In the growth of a coral there is a mere discharge of the earth's current through the mica of the earth's crust.

The coral is only a construction of cells precisely like the cells of the plant or animal except that the cells are given a greater consolidation. The time the coral exists and requires for its development is the cause of the greater consolidation. The coral stock is rendered calcarious by the action of water that is salt. The cells as fast as formed are partly decomposed by the salt and water. The decomposition thus produced is the means for creating a stock of coral that is incapable of further decomposition. This partly burned condition of the coral is as well calculated to preserve the coral as the decomposition of wood is to preserve its substance in the form of coal or ashes.

A polypus is a bud of a coral, and it is different from a bud of a common plant only in the absence of leaves. The current of electricity that is escaping through the coral is consolidating in the same way that it consolidates in the construction of cells in plants or animals. In its escape through the pores of the coral it consolidates in the shape of a spear point, or in the shape of the current itself after it is out of the pores.

In these spear shaped constructions there is a mere creation of a species of blossom on the coral, and in these incipient beginnings of the growth of a branch, or another circle of growth, the so-called coral insect is found. These simple points of the development of a coral are to this day believed to be insects by the whole world of scientific teachers and the teachers of schools.

They are no more insects than a blossom on a rose bush, and there is not a single manifestation of animal life in one of them.

The reason why they were supposed to be insects by the investigators of the subject was the mere fact that they are at first soft and yielding, as the cell of a plant or animal is.

Now we desire the reader to obtain a coral and examine it with care, and discover, if possible, a single fact inconsistent with what has been stated, and that he observe every cell and order of unfoldment that can be seen in any plant.

What an overthrow of the popular theories of coral development if what is stated is correct! We are satisfied that if the work is examined it will be found to be correct in every particular.

Above the parallel of latitude thirty-eight or forty (it is different on the different shores)

there is no growth of coral now, and all that ever did grow above these points are converted into rock. Above this part of the earth only algæ and crinoids are growing.

What could have stopped the growth of coral and caused the commencement of the growth of algæ? The answer to this inquiry will astonish the reader more than the overthrow of the theories of coral development.

In the colder waters there is less salt in solution and in the greater freshness of the water and absence of heat a coral cannot be constructed. After all a coral is but a plant calcined by the action of salt.

Now we want the reader to observe that in all the wide world the fact is known to scientists that the coral is not found above these points of latitude, and not a single reason is given or mentioned as the cause of it, or why polypi are absent in these waters. It is only a fact to be speculated upon, and the speculation is limited on account of the stunning character of the problem.

Let us ask the reader to get a chart of these algæ, crinoids and zoophytes, and see if they are not in all respects corals without any calciferous character. They will be found to be in all respects like the coral and of the same method of construction, except in the absence of a calcarious character. No one will doubt or deny it for a moment. The great bunches of coral are only masses created by means of the duration of the earliest.

The creation of continent or island was impossible except by giving corals a character that rendered them imperishable. All that prevents a plant becoming as great as a continent or island is the incapacity of its stalk to endure.

Can any author of science deny that corals and algæ are of similar forms, and can it be denied that a coral is not produced where algæ and crinoids are abundant? Will any one deny that a coral is a plant as well as an organization admitted to be a plant, if the cause of its development is what has been stated, or the same?

We can inform the world why corals were not allowed to be constructed in the northern waters as well as sea plants after such plants appeared.

In all tropical regions there is a greater degree of saltness of the water, and in this fact alone the cause is found for the construction of calcarious plants.

The same calciferous condition of plants would exist in the more northern or southern waters if there was as much salt in the water and a temperature that would dissolve it as well as it dissolved in warmer latitudes. The cause of the difference in the saline character of the oceans is due solely to the tendency of the salt to crystalize where the water is cold. This fact accounts for the immense beds of salt in the waters of the ocean north of the coral creations and on continents and islands over which the oceans once extended. All such beds are mere deposits of crystalized salt.

In every continent where a salt bed of magnitude is found there was once a coast of the ocean, and where a decrease in the temperature of the water allowed a deposit of this substance.

In all countries where a salt bed is found there is also a great amount of fossils of partly calcarious plants, of which the crinoids and so-called zoophytes are members. There is no such thing as a zoophyte animal. The only thing that causes such partly calcined condition of the plant is a small amount of the effects of the salt of the water in which it grew. So are the algæ of the ocean to-day in warmer parts of the ocean partly calcarious, and the degree of calcariousness is sure to correspond to the amount of salt in the water. A gradual change is discovered from the common oceanic plant to the coral of the tropics.

Now what a satisfactory explanation this is for the existence of corals and algæ in the ocean if what has been stated is the truth; and what a long step we have taken in deciphering the unfoldment of the globe! We have discovered that every organization in the waters of the globe other than animal is actually a plant, and all that renders part of them corals is merely the power of the salt and heat of a part of the ocean to create a burned condition of the plants. In another generation this cause of the difference between corals and plants will be taught in every school in the country, and the explanation will be credited to our work. No other author of science will obtain the credit, for every popular teacher of science is sure to give his assent to the fact only after school children are capable of observing it.

Now, if we can discover why corals were once constructed in the waters as far north as

Kamtchatka and Greenland, or as far north as any land exists, we shall have taken another stride in the journey through the development of our world.

It is a fact well known to all geologists that a part of the rocks of all such places were corals once, and that the waters of the earth were tropical in temperature as far north as any land is existing; and that fossil plants which could have been developed only in warm waters are found in such latitudes, and the fossils of animals of tropical characters are found as far north as the coast of Maine, and on the western shores of continents much farther north.

Certainly a cause must have existed for this warmer temperature of the waters so near the poles and the equally warm atmosphere over such waters and parts of continents in the same latitudes.

It is to disclose this cause that we will state that only a greater difference in the depth of the water created by the growth of continents produced this change in temperature of both northern and southern hemispheres. All that could possibly convert old Greenland into a snow bank, and all the northern portion of our continent into another, and make snow banks of every part of the land of the earth as near the poles, and cause them to commence sending icebergs into the ocean, was the increase of the depth of the waters of the earth around the polar regions. All of this great change will appear as simple as the change produced in water, when it is placed over a fire in different vessels in different depths. Great stars! what a terrible question for our scientists, this change of the climate around the poles! What a thunderbolt this will be if it can dispose of that monstrous humbug, the "glacial epoch." What a concussion on the ears of all the great dignitaries of science when they hear that in the shallow waters of the earth that existed when Greenland and all polar land construction was first being developed, could be so warmed at the poles by the great conflict of electricity in the sky we call the sun, that it possessed as much heat in such latitudes as it does at the equator now, and that the vapor of this warm water was warming these commencements of continents! How simple are the devices of our good calculator of the world unseen!

Who is going to deny this assertion when it is barely necessary to ascertain what could enable the water of the earth at such places to become warm? If the water was warm the atmosphere over both water and land was warm.

A child can demonstrate this explanation and prove its truth by placing two vessels containing water of different depths on a plat of ground where the sun shines and observing the difference in the temperature of the water at different times. Let the pan of the milk dairy be the instrument for one part of the water and a common wash boiler for the other, and it must not be forgotten that only a few degrees higher temperature is wanted in cold countries to convert them into temperate conditions of air and water, and a few such degrees of increase of temperature to render them tropical.

Will any one try this experiment and inform the world what the depth of the water was when Greenland was as green as Ireland is now, and what depth it must be now? These facts can be so well obtained by calculation that a sea sounding will be unnecessary. If an account is taken of ocean currents the measurement can be accurately made, and so can the depth of the ocean at any point of the globe. "What an astonishing assertion this is, and when is this writer to get through making startling assertions in this paper!" will be exclaimed by a hundred readers. We shall get through only when all the errors of the scientific preachers are overthrown and a partial description of the works of creation are given the people. When this is accomplished the balance of the description of creation will not appear surprising.

So good an understanding of the general operations of nature will be had that an understanding of all the rest will be obtained as matter of course. We do not care to injure the sale of any one's books, but it is our purpose to dispose of the foolish contents of all the scientific works of christendom and pagandom (and there is little difference in their quality) in the course of our work, and we will here promise every reader of this paper that every scientific book and publication in the world that is now teaching the stuff called science shall become as valueless in a short time as the inscriptions on the obelisks of Egypt, or the scratches on the rocks that are accepted by scientists as evidence of a glacial epoch.

It is coming to be seen that there is a way

to uncover all the methods of creation, and it will be done in spite of all the copiers of old ideas that are in existence.

Now we can discover that all that makes the earth warmer at the equator and at the regions of the earth where the oceans are broadest is merely the shallowness of the water in such parts of the globe. As true as the fact that the co-called sun will warm a shallow pan of water more than a deeper amount, our earth is warmed by the heat produced on account of the shallowness of its oceans; and it is warmed more in the region of the equator only because there is more shallow water in this portion of the earth and in its oceans. If it was a fact that the water was more shallow around the poles the warmer seasons would be at the poles. A complete change would take place in the character of the illumination that is warming and lighting the earth, and instead of one illuminator we would have two, and a great zone of ice would exist on land at the equator. Let our readers observe what is here stated, and obtain a chart of the planet Mars, and behold a world with two suns, and then observe old Jupiter with a belt of ice and snow around its equator, and a partial condition of ice and snow between its equator and its poles and a sun at each pole. 'What a great discovery, if this is a fact!' all who see this article will say. We cannot further describe these great objects of the heavens in this article, and must drop them till the subjects of astronomy are reached. We can only explain our own world and disclose the cause of its condition here.

We desire the reader to remember that in the existence of vapor in the atmosphere there is all that creates heat. When the atmosphere is vibrated, the vapor is vibrated, and it is all that will afford heat. When there is no vapor there can be no heat.

Of course, if this is the philosophy of heat, an evaporation of vapor is necessary to create heat in any part of the world. Just to the extent that vapor is created will the temperature of the atmosphere be increased; and just to the extent that an ocean or any body of water is shallow will it become warm under the influence of the sun, and allow a greater increase of vapor over it. When the vapor is in the atmosphere it is wafted over the continents, where it gives them a warm atmosphere.

All the smaller bodies of water operate in the same way.

The influence of this heat is all that opens the surface of the ground and permits an escape of the earth's electric current; and this current consists of the influence that is conflicting with the same influence of the sun and creating the blaze in our sky that is doing so much to confound our astronomers. In this co-operation of sun and earth there is all the means of giving us the great display of light and beauty that is sweeping daily around the globe, and creating all that is affording the changes of day and night, and seasons, and growth of plants. The great satellite of the earth whose beauty is greater than anything the eye ever rested on, is causing all the changes of seasons; and it changes them merely by assisting the sun in warming more of the earth than its own power is capable of accomplishing. As this good and glorious empress of the night is changing her pathway through the sky a change of our seasons takes place. It changes its course by reason of the attraction of the earth in its control of this body, and when we have explained what it is that accompanies the earth around the sun, it can be seen why this old beauty of our night is caused to step one side every six months.

No operations of the stellar bodies are more interesting than the conduct of the moon, and when its operations are explained the cause can be seen for the wabbling course it pursues around the earth. The astronomers are now and for centuries have been trying to discover what the cause is of the moon's constant alterations of its position in its orbit, and although they can see it is produced by the attraction of the earth to a great extent, they cannot understand why the earth attracts it differently in different seasons. Herschel observed fifty perturbations of the moon in a single revolution.

The oceans, seas and bodies of land of the globe are the instrumentalities that cause a difference in the earth's attraction of the moon, and the changes produced in a season are due merely to the position of the moon in respect to these waters and lands. The oceans and land affect the moon according to their discharge of electricity. The oceans will be found to exert a different power on the moon according to their size and depth of their waters. This is all we can state in

reference to the moon, except its power to create tides, and it is all that is necessary to be stated here.

What is stated brings us to a consideration of the operations of the oceans called currents, and when these operations are considered we will discuss the cause of tides.

The currents of the oceans are as important affairs of nature as the oceans themselves; and if their character was understood, a whole catalogue of wonderful and wise phenomena would be seen.

Each current of the ocean is describing an elipse more or less perfect, and a circuit of electricity as plain as one produced by a common battery with its poles connected. The circuits can be seen in any map of the currents, and in every instance of a current there will be found a continuous whirling of water in a partly circular direction.

The currents that extend their circuits into the Arctic and Antarctic oceans will be found to be only partly represented on the map, and the reason for this is the fact that the insufficient explorations of such oceans have not enabled geographers to make a correct description of the currents that are passing through these waters.

Let the reader observe a chart of ocean currents and our statement will be completely verified. Now, in these circuits of the oceans there can be found the only breakwaters of these great bodies of water that nature has constructed.

The only use of an ocean current is to prevent a swell of the water produced by the moon becoming so strong and high as to damage the shores of continents and islands. This is all they do, and the current is apparent only near the coasts of continents and in its crossing of the ocean. The sweep of the water is precisely where it should be to accomplish the object for which the current is intended—a most convincing argument that a calculator was the author of these currents. If it were a fact that a tide could not injure a continent or island were it not for such breakwater an ocean current would be the one useless thing in creation.

The cause of an ocean current can be found in the heat of the water at the equator and the greater outflow of the earth's electric current on the borders of the water. The difference in temperature of the water on one side of it would produce only a rolling of the water as in a vessel where only one side is heated.

The ocean current is coursing in an opposite direction or in a direction at an angle to such a rolling of the water as the heat at the equator would produce. Now, there is in every current of the oceans a means of ascertaining the depth of the water at every part of an ocean, and it is found merely in the width and direction of such currents. The general depth of the water is denoted by their whirling portions. Considerable variation will be found in the depth in the current and in the more quiet center, but the more general character of the floor of the ocean is as perfectly disclosed by the current as it could be by an elevation of it.

Let us now consider the cause of tides; and if it is possible to ascertain what heaps up the water when the moon is passing over it, we can surely ascertain what connection the earth has with the moon, and what the influence is called attraction of gravity.

Every time the moon passes around the earth the water of every ocean and the Mediterrean Sea and Gulf of Mexico, are caused to start toward this great object, and the whole cause of this phenomenon is claimed to be due to the gravitation of the water toward the moon on account of the moon's attraction. This very attraction is all that is necessary to explain in order to explain the cause of the attempt of the water to go to the moon.

The whole scientific world are confident that what is called gravity or attraction of gravity can never be understood; and with a great portion of them the idea prevails that it was purposely calculated to be forever a mystery to the human family.

The attraction of the planatory bodies is in every particular the same kind of attraction that is operated by the common magnet. The magnet is simply a piece of metal or any substance around which a current of electricity is coursing.

If the substance is a piece of glass or amber the current is created on its surface on one side, and the current will only course over one surface as it courses in an ocean current. If the substance is a bar of steel or other metal the current will course from one end to the other, and pass through the atmosphere back to the end it passes from. If the bar is bent in a way to bring the ends near together, the current on leaving one end will pass across

the space between the ends and pass over the metal continuously. It is in the quick passage of the current from one pole of the bar to the other that the current is increased nearly to the same extent that it is dissipated in the atmosphere at other points of the circuit. The passage of the current through the at mosphere decomposes the atmospheric gases, which decomposition of gases generates more electricity. This capacity of the current to decompose atmospheric gases in its course is all that enables a bar of metal to remain a magnet for a great length of time. The straight bar is able to retain its magnetic character but a short time, and for the reason that the current in passing through the atmosphere from the pole it leaves to the other, is not aided by the part of the current at the other pole. The passage of the current through the atmosphere on such a magnet is more difficult, and the current is as much dissipated as increased by the passage.

The current on one side of a piece of glass or amber is soon dissipated and for the reason that it is resisted by both the surface of the amber or glass and the atmosphere.

The current on any magnet is created either by rubbing the magnet or by placing it in a current already created. Nothing is performed in the rubbing but a small amount of decomposition of the gases of the atmosphere around the magnet and the particles of the surface that is rubbed. This converts such substances into electricity.

Only such objects as are incapable of allowing a current of this influence to pass through them with ease can be made a magnet. All that prevents a piece of wood or any substance from becoming a magnet when rubbed is the coarseness of its composition and its capacity to allow the influence to pass through it. The degree which any substance can acquire a current of electricity on its surface will correspond to its capacity to prevent the current passing into or through it. The strength of the magnet always corresponds to the amount of the current on its surface.

If the atmospheric gases are completely excluded from the space between one magnet and another, no power can separate them after they are united but the force of another current of this influence. The substance of the magnets will yield sooner than the union of the magnets. The exclusion of such gases between any two magnets, or between a magnet and a substance that is of a similar nature is all that causes an approach of one body to the other or the union of the magnets.

The attraction of a magnet for a piece of a similar metal is no more a wonder than the collapse of a vessel or any chamber when the atmospheric gases are excluded from its interior. The two operations are identically alike.

The only thing that occurs in these operations is the exhaustion of the gases between the parts of the objects that come together. How simple an explanation of the greatest wonder that has agitated the mind of man.

The very simplicity of the phenomenon has been the cause of its mystery. The cause of the exclusion of the gases between the objects attracted and attracting, is the current of electricity that is increased on the surfaces of the attracting objects. There could be no increase of the current if there was not an exclusion of such gases. The force that presses the objects together is merely the pressure of the gases behind the objects attracted; and it is a fact that no body or piece of metal can be attracted by a magnet that is wholly surrounded by a current of this influence, and any common magnet is capable of illustrating and confirming this fact.

A small particle of metal that will be quickly attracted to either pole of the magnet if placed near it, will, if dropped midway between the poles, be nearly suspended between them, and if the current existed in a sufficient quantity and was not moving, the atom of metal would be entirely suspended between these points. Now, all the facts concerning the character of the attraction of common magnets is observed in the attraction of worlds for each other, and no other character of attraction is possible. Every body in the sky is attracted more or less by the other bodies, and the same pressing of substance on the side opposite the attraction is all that causes them to make an obeisance to a passing planet or other body. The current of each body is the instrumentality for decreasing the volume of atmospheric gases on the sides of the bodies presented to each other. In every phenomenon of this character only an opening of the gases of the atmosphere on one side of the body is all that takes place except the pushing by the atmosphere on the opposite side. All that prevents a magnet from attracting a piece of wood or any substance is the

passage through the wood or substance of the current and creating a current all around it. In the exhibition of a suspension of an object in a current of electricity can be seen why the earth is a better magnet for attracting non-metallic substances than a common metallic magnet. In a piece of metal there is a substance created from a pressing of one of the metallic bases, and the only thing it will attract is an object composed of a substance of a similar condition of decomposition. All substances were once in the condition of mica. All substances are either different conditions of decomposition of mica or different conditions of decomposition of this substance pressed to different extents.

In the operations of electricity upon the different substances of the earth, we can discover a perfect confirmation of this important fact. Let every one who observes what is now to be stated give the statement to as many of the fashionable authors of science as possible, and ask for a contradiction of the proposition.

The weight of any object on the earth is just the amount of the earth's attraction upon it. In other words just the degree of the exclusion of atmospheric gases between the object and earth. The exclusion of such gases will depend wholly upon the character of the substance of the object that is attracted.

The earth contains a great quantity of all the substances that are ever attracted to it. In the distribution of such substance in the earth's crust a great wonder is to be revealed. The very presence of all the affairs of which the earth is composed is created in every square foot or square mile of its solid crust.

In the decomposition of the crust of the earth there has been a complete process of gathering the different substances into the soil, and where the earth is covered with soil there is almost an equal distribution of the properties that constitute soil. The attraction of the earth is in all parts of it as uniform as it can be at this age of its existence. The exceptions to the attraction of the earth are observed in the water, and in places where there are considerable quantities of metal. In the attraction of the earth over a bed of metal of any character there is seen an increase of so-called gravity for any metallic substance, and over an ocean where the water is deep there is observed a decrease in the weight of any substance. The effect of the water in preventing the discharge of the earth's current is the cause of this difference.

The deeper the water the less will be the attraction of the earth over it.

The deep water is said to be more condensed and more capable of supporting bodies on its surface. This is a mere attempt to dispose of a question that is not understood. The top of water becomes no more condensed by the increase of the extent of water under it. The water at the bottom, of course, does.

The manifestation of the decrease of the attraction of the earth over deep water is observed only in the apparent power of such water to bear objects upon its surface better than where it is shallow. The attraction of the earth decreases in the atmosphere gradually as we ascend, and this is merely a result of the decrease of the volume of the current of electricity discharged by the earth. The cause of the decrease is the resistence of the gases of the atmosphere. A very convincing operation of this law is seen in the greater attraction of the earth upon an object in a vessel in which the atmosphere is as far exhausted as possible. In such a condition of air all objects are attracted alike. A feather will fall as quickly as steel. Now, all that renders the earth capable of attracting one substance more than another is the difference in the assistance such objects render the earth in opening a passage through the atmospheric gases. A piece of steel or other hard substance is constantly generating a current of electricity around its surface to a greater extent than is performed in other substances, and the current that is extended to it by the controlling magnet will not pass through it to such an extent, and its recoil assists the two currents in opening the channel through which the smaller magnet will pass to the other.

The reason why one substance is capable of attracting a similar substance more than another is the fact that the operations of the current of each are similar, and a more complete and accelerated work of clearing a passage between them is accomplished. If the volume or velocity of the currents be different a conflict more or less disturbing takes place. Now every character phenomenon that can be discovered by the so-called attraction of gravity in the earth or other planetary body can be obtained by experiment with a

common magnet, and even in opposition to the earth's attraction. The attraction of the earth is operated through every kind of substance. So is the attraction of the magnet. The common magnet cannot exert an attraction through metals until the metal has become a part of the magnet. Neither can the earth. Water halts the attractive power of a magnet. So do the oceans halt that of the earth. The earth attracts through wood, glass and all substances that are not metalic. The magnet does also, and in none of such phenomena can any difference be detected between the two magnets, except in extent.

A complete refutation to any claim that the earth is one kind of an attractor, and a magnet of steel is another, can be found in the fact that a piece of steel is constructed from the greater magnet and obtained all its capacity for acquiring attractive powers from the terrestrial magnet, and they are increased only by the greater condensation of the particles of the steel. It is the more condensed condition of substance only that gives a metal more power to constantly generate and possess on its surface a current of electricity. A rubbing of the surface of a hard substance accomplishes a more complete decomposition of matter than it can where the surface of a substance is in a great measure open. A diamond will give out an electric current faster than a metal for the reason that it is capable of more rapid decomposition. A small amount of heat will destroy its brilliancy.

Now, in what has been stated in reference to the philosophy of the attraction of gravity all the explanation of the cause of tides is found except that in the wave created by the passage of the moon over the water, only a release of the pressure of the atmosphere upon the water is created. The water reacts when the pressure is removed.

In the second wave only a reaction of the first is observable. In the middle or over the deeper portions of the ocean there is but a slight elevation of the water. The counteracting influence of the earth which cooperates with the moon's to create a causeway from one body to the other is in a great measure destroyed by the great volume of water where the oceans are deepest. There can be no considerable pushing of the water toward the moon in such places. This is all our space will permit us to state in this chapter.

We will describe the geyser and its cause in another chapter, and when it is done we will commence the description of the different substances of which the earth is composed, and the first thing that will be discussed will be the cause of the existence of salt. It is quite time the world knew what created so common and abundant a substance. We can assure all our readers that a satisfactory explanation of the character and cause of every substance of the earth shall be given, and the reason for their being where they are found. No romance in the volumes of stories will be so interesting to the reader as the uncovering of the ways of creation that gave the world and its contents to the children upon it.

Chapter V.

When the chapter that we are now to write is concluded there will be no subject of a geological character that will need overhauling.

Only a careful examination of the individual affairs of the earth, in the light of the work which will have been given, will be all that any one will want to do in order to comprehend what operated to give such affairs existence.

This chapter, as well as the previous chapter, will be lengthy, in order to get through this part of our work as quickly as possible.

In what will be stated all the substances of any consequence of which notice is taken by the geologist and chemist, and concerned with the earth, will receive an explanation. As we promised in our last chapter, the cause of the existence of salt will be first considered.

This abundant substance is as simple a compound as water.

It is described as a compound of chlorine and sodium.

This is all the explanation of one of the most common and abundant commodities in the world that science can give.

When the question is asked what chlorine is, the reply is that it is a gas, thick and suffocating, and when pressed it becomes a thick and suffocating fluid of a yellow color. In answer to an inquiry what sodium is, it is replied that it is a metal a little lighter than water, and so soft it yields to the pressure of the fingers. These explanations of the two compounds of salt is all the scientific world can offer. When the information they contain is obtained, the student is as wise as when the questions are asked. He is no wiser in reference to the existence of salt.

Let us see if it is not possible to ascertain precisely just what salt is, and why it exists in the ocean and in other bodies of water.

Every particle of salt contains a small amount of alkali, and a small amount of the decomposed crust of our earth. Every alkali is merely a portion of the water of the earth, and a small amount of ashes of any burned substance. The only difference between an alkali and an acid is in the fact that in an acid there are particles of an unburned substance.

Now, the alkali can be given a variety of conditions merely by a greater decomposition of the substance that is mixed with the water. If it is but common ashes, produced by an ordinary combustion, a mere common alkali is the result. If the water is given the ashes of a substance burned by a blow pipe or whatever will decompose the substance further, the product will be ammonia. If the substance is burned by electricity, and which decomposes still more, the product of its mixture with water is chlorine. If the decomposition is still greater, as it can be by again subjecting the substance to a current of electricity, and then restoring it to water, the product is the substance that yields its current of electricity to whatever it is put in contact with. It is called prussic acid.

Now, this is all the reader will want to learn of the character of chlorine, except that when the decomposed atoms are in the water, the water decomposes them still further, and if the current of electricity generated by the decomposition could get out of the water no chlorine or acid could be produced.

The water will hold it, and the interminable action of this electricity in the water is all that constitutes the active character of any acid or alkali.

The salt of any body of water is obtained solely by the decomposed substance of the crust of the earth becoming mixed with the water. Only an alkali is produced, and the decomposed substance is in all cases a burned amount of mica. It is the burned portions of the cells of the human or animal body that affords the so-called sodium for creating salt in the urine. The cells of all organizations of the globe are identically like the great cell that constituted originally the globe itself. Only a difference in size and condensation could be created. Now, will all who see this observe a portion of the evidence that our world was once only a cell of mica. In its decomposition "sodium" is created and mixed with its water. Its bladders are containing a urine as salt as that of a wolf. In every animal body and in every plant "sodium" is created in exactly the same way, and the bladders of such organizations are containing salt urine.

Every physician knows it is the ashes of cells that is deposited in the bladder. It is also known that in the plant sodium is obtained by a decomposition of its cells, and if the plant is allowed to make its own deposits it will fill a considerable space with ashes that create ammonia in the air.

No writer of science will deny the analogies here pointed to.

The crystallization of salt is a work of which the world is needing explanation as much as it does of the character of salt.

Every crystallization of any substance is performed by the attraction of "sodium" to a cell of a plant or animal, and the accumulations of such attracted substance constitute the masses of crystals. The accumulation is performed by an attraction of crystals for each other. Every cell or tissue of any plant or animal or human body is given a lining of the same material that the cell is composed of, and when the other part of the cell is destroyed, as it is by decay and death, this lining still exists. Around all such linings the atoms of "sodium," or whatever is sufficiently decomposed, will be attracted, and the observable body thus created is a crystal. In either atmosphere or water that is sufficiently cold this work of garnering into crystals takes place, and if a water or atmosphere is without either the linings of such cells, or the decomposed substance, no crystallizing can take place. Whenever such substances exist in water or atmosphere that is sufficiently warm, a current of electricity passes through such cells, from one open side to the other, and the process of growth takes place. Every such operation of a current of electricity produces an animal. If the operation takes place in only a cell, the animal will become one of those insects that the scientific world is giving such a careful scrutiny. If the current passes through a tissue of cells, of this refined character, a worm is generated. If it passes through a whole organization of such cells, as it can if the plant cells are not separated, an animal of the size of the plant or greater is created.

The process of growth in the least insect is the same as that of any animal, and it is performed simply by the current attracting to the interior of the cell a portion of the "sodium" or decomposed substance in the water or air, and decomposing it further by a burning of such atoms. The current generated by this decomposition is pressed to the surface of the animal and consolidated into cells.

Let all who read this remember that merely in the fact of a cell lining being in warm water or warm air there is all that produces an animal instead of a crystal. Let all who see this also remember that it only requires a sufficient amount of "sodium" or decomposed substance in the atmosphere of the earth and in its waters where they are warm in order to produce bacillus as large as alligators or elephants.

When our teachers of science can understand what affords life this great disclosure will appear as clear as a great fame for those who have discovered nothing.

Now, in the cells of the coral a substance was created that afforded the warm ocean and its sodium a thing around which the sodium could construct its crystals.

Every crystal of salt is shaped like the cell of a coral, and every clump of such crystals is shaped like a clump of corals.

What a satisfaction it will be to the good wife or cook, if she is informed that in a lump of salt there is a soul of a coral, and that it is covered over with the ashes of a part of the crust of the globe, and that when the salt is dissolved in water there is only a thick alkali. A brine is merely a thick alkali, and if a part of the salt is separated from the water, in a short time the water will be as caustic as this substance ever is, and taste just like it. In this explanation of a briny ocean, all can see why a coral was constructed from a mere plant.

An alkaline solution burned the plant to some extent.

When it is understood what the salt of an ocean can accomplish, in giving color to a marine plant, the curious orders of corals that bedeck the floor of the ocean can be contemplated with satisfaction.

The difference of decomposition of these good works of usefulness is all that gives them different colors.

Now will the observers of what is already stated give us a careful examination of what is to be stated. We want a whole country of critics to criticise every word we shall employ in this work.

In the construction of what are called coal measures there was a device employed as astonishing as anything in nature. The present understanding of scientific authors concerning coal deposits is, that a great field of plants of the character of ferns became covered over with washings of sand and earth from the elevated portions of the earth's surface, and that in the different strata of coal measures only a repetition of this operation was employed. This proposition is given with as much confidence of its truth as any of such teachers will describe their own work.

It is as untrue as though they claimed that a cart and horse were employed to dump the coal and its covering. The substance of coal is only coral burned to a char. The coal is only part of the coral fringe that girdled each atoll.

When the upheaval occurred, as we have already stated, a current of electricity discharged by the earth was the force that produced the upheaval. In a coral upheaval only a great smashing of a coral mass took place, and the broken coral piled up in a continuous direction. In this broken amount of coral rock a degree of burning occurred in the outflow of the current that produced the upheaval. When a greater amount of coral creations extended the coral continent, another upheaval occurred the same way around the borders of the growing continent.

This construction of a fringe was much more extensive than the preceding one, and a greater degree of burning took place. In a greater burning of coral rock a coal was produced. No coal can be found except where a coral atoll of great size is seen, and in every locality where coal is found an atoll in all respects like the one created when the continent or island was being developed will be seen. The same partly circular fringe and the lagoon and a river of considerable extent coursing from one side of it to the outlet of the lagoon. Do not fail to examine this statement, and discover, if possible, a lump of coal where there is no partly circular range of small mountains.

In this coral atoll of charred coral a coal measure can be found of some extent in any part of the globe. The amount of coal will in every instance correspond to the size of the mountains.

If the range is only a hundred feet high the coal will be only about a foot deep. If the mountains are as high as a good sized church the coal will be about two feet deep. If the mountains are a thousand feet high it will be profitable to open the mine. When the mountains are above this height a coral rock is found and melted rock. The heat in the upheaval of so great a mountain only melted the coral. It was too great a heat to convert the coral into a carboniferous condition.

Let us inform all who are interested in the development of a coal mine that they can find in what is here stated that a coal measure can be disclosed with perfect accuracy. On all the high ranges of mountains only a greater discovery than what is here made is to be given to the world.

Let every one whose farm is situated on a side of a partly circular range of mountains as high as the Orange Mountains of New Jersey, commence furnishing their neighbors with coal. They will be sure to find the coal by opening a side of the mountain.

This is all we need state in explanation of coal or its locality. The coal of our country is under a growth of pines. It cannot be found under any other species of plants.

In every State of the Union a coal measure exists. The only difference in them is in extent and depth. The old Bay State is provided with sufficient coal for a whole nation. Only a neglect to bore on a hillside to a sufficient depth has prevented this fact becoming known.

On the plains of the Western States a considerable boring was necessary to obtain water, and a coal measure was almost everywhere disclosed. The measure in each instance is surrounded by hills several hundred feet high, and where there are no hills there is no coal. Look at the charts of coal measures, so far as coal is discovered, and see if the measures are not in hilly countries and covered with pine forests. The different strata of coal in one locality are produced by the breaking of the coral rock into tiers, and thus creating crevices between them. The oven of the crater would extend its heat into such crevices and burn the thinnest strata into coal. It is always a fact that the thinnest strata are the farthest from the centre of the mountain. All that is giving our coal miners difficulty in getting coal from the deepest measure is the unburned rock above the thickest stratum. Every coal mine should be approached from the top of the hill. A vast amount of blasting and digging would be thus saved.

Now if we can discover what produced the glycerine called petroleum in the crevices of the coral rock we can give good advice concerning the uses to be made of this substance.

Every oil is the separated cells of the plant or animal organization. It is only cells in a mobile condition. The cells of plants will give a good oil of the character of glycerine. Animal cells will give an oil of the character of grease. The difference is caused by the greater size of plant cells. The oil of plants is lighter. In every cell there is a way to create an explosive material, and it is obtained by giving the oil a wash of coal dust. The coal will convert the oil into powder, and when it is dry the combustion is so rapid the whole mass will explode. The only thing that creates nitro-glycerine is a wash of acid which partly burns the surface of the cells. This operates as coal dust does in converting the cells into powder. The explosion of

the oil will be less easily effected if the cells are coated with carbon. The whole of the oil beds of the Alleghenies are capable of being converted into magazines of giant powder.

The oil is placed there for the purpose of furnishing blasting powder for opening the mines of coal. The coal fields of that region are covered with more or less glycerine. The glycerine can be exploded by forcing coal dust into the oil and igniting it with a charge of electricity. When the explosion takes place a whole measure of coal will be uncovered.

Let this device be attempted. It is sure to succeed.

Now in the creation of the glycerine of the crevices of coral rock, a process of giving our miners a force for blasting rock was adopted as much different from the one supposed to be adopted as the creation of coal was different from what is generally accepted.

The cells of which petroleum is made are the cells of corals, and they were separated by a current of electricity which operated to rend the coral rock. In the escape of this current, a considerable amount of decomposition of the coral was performed. The separation of the cells of a coral will produce oil as well as a separation of plant or animal cells. Every particle of bituminous coal is given its oily character by a separation of some of the cells of coral rocks. In all such coal a greater degree of decomposition occurred. It is lighter on that account. When this decomposition of coal was of this extent a great deal of oil was created, and in this condition of the coal the oil could come out. When it was out it would run as water does into the crevices of the upturned rock.

The only thing that gives an oil well a voluntary discharge of the oil is the position of the well in respect to the crevice. If the upper part of the crevice is higher than it is at the boring a spouting of oil takes place. If this is not the case an outflow is not possible.

Let this be remembered, and an immense saving both in boring and pumping will be made.

This philosophy of getting oil can be applied in obtaining salt as well. It is adopted in the case of artesian wells.

Let us give our good friends in all coal districts a word of advice concerning the explosions in coal mines. The coal (*fire damp*) damp of which so much has been written and spoken, is a harmless affair. It is never exploded.

The explosions in coal mines are caused by the coal dust giving the oil an explosive character.

Only a powder of such substance is exploded. The reason why the explosion is not seen to be on the floor and surface of the mine is because the miners' eyes are closed in death when the explosion occurs in a vault where they are at work.

They never are allowed to give an account of what they first saw. Every explosion of this character is a conversion of the cells of petroleum or coral cells into electricity. The coal dust merely affords a combustible substance for the surface of a cell. The nitrogen of the chemical creation is a similar combustible.

The means for preventing an explosion of this petroleum is merely a washing of the mine of its dust. Let every coal mine be washed and the coal in the water removed. No explosion can occur if this is done every month.

We have employed the words "coal damp" in order to avoid the use of a most ridiculous term. A "fire damp" is what has never been created. The damp of fire is what is seen in the atmosphere after a kettle of water is given sufficient heat to create vapor. This vapor is inexplosive.

It is our desire to disclose another work of electricity in mountains, and it will complete a description of all the constructing of rock that has taken place.

Only a little less heat than was required to convert coral rock into what is described as coal was all that was necessary to construct trap rock.

Every geologist is confident that heat was employed in creating this rock, and they are just as confident that the rock was formed by the deposit of the sediment of great mountains. It is to destroy all such mistakes that we are giving our conclusions upon such affairs.

All that converted coral rock into trap rock was the same fire that converted other parts of the general coral mass into coal.

On every hillside in this or any country there can be seen peeping out of the earth a portion of the fringe of a coral atoll. On the surface of this rock a smooth and sometimes a scratched surface can be witnessed; under the surface, a condition of rock in all respects like trap rock. If the rock is in a range of considerable hills, it is only necessary to blast a few hundred feet to obtain coal. The coal will be the trap rock considerably more burned. Just as certain as

the rock appears will its condition become darker and more "carboniferous" as the depth of the rock is disclosed.

If the hill is small only a very dark blue stone is discovered. If the hill is great the blue stone becomes coal. There is not to-day in any country a geologist that is satisfied that coal was covered by a consolidation of sand or mud, and because they cannot account for the existence of either. A hill was never overslaughed by a considerable amount of any substance. Every avalanche of any substance finds its course in a ravine, and deposits its substance in a valley. All coal beds and rock are found on hill and mountain sides. Only a few boulders are given a place on the meadow and plain.

Let no one mistake what is our intention in this remark. Every coal bed and rock bed, except what is hereafter explained, are results of an upheaval of a bed of coral, and no rock is discovered of any other character except a few boulders, and what is soon to be described. When our readers pass through a tunnel, cut for the purpose of a railroad, or for any purpose, let them observe the character of the rock, and discover if possible anything but a coral bed, more or less colored and contracted by heat. Let them examinine any such rock and observe anything in it but a consolidated mass of coral contracted or charred by heat.

When this is done we ask you to prevent as far as possible the teaching of the errors of scientists upon this question in the schools of the country.

What a glorious provision for giving mortals a quantity of all the hard substances that a community could require.

It is only a mere item of the grand scheme of the Almighty for furnishing man with the means for his advancement.

Now on the tops of great mountains of all parts of the globe a different character of rock is found. It is called quartz. Sometimes it is extended to a base of such mountains. It is always harder than trap rock, and it glistens as the sparkling wave.

This shining substance is only a mixture of mica and coral. The depth of the crater is the cause of the appearance of the mica. Only on high mountains is quartz discovered, and it is a fact that in the appearance of this mica a word is brought to the surface of the globe that within the mountain there is a channel that extends to the hollow of the globe. Only a tearing up of the substratum of the earth's crust will enable a current of electricity of the earth to cast the earth's mica upon the peak of the mountain.

Another astonishing disclosure is obtained from the capping of mountains with mica. It is that in the height of the mountain a measure is obtained of the thickness of the earth's crust.

A most startling disclosure, is it not? Every such range of mountains as appears on the western side of our continent discloses the fact that in the height of the peaks a cause is discovered for the general depths of the ocean. A grand device for measuring a vast ocean's depth. About two and a half miles is found to be the average depth of all oceans.

About two and three-quarter miles is found to be the average elevation of great mountain ranges. If an ocean is only a fourth of a mile less deep than the greatest of upheavals are high, it does look as if only a small depth of water originally occupied the globe. For if the mountains were cast into the ocean, and the hills also, the waters would not only be less deep by considerable than they are now, but what was not performed in rendering them shallow, by so much deposit, would be accomplished by the water over-coursing the land. This spread of the water would reduce its depth by at least two-fifths, and if the deposits accomplished as much, the water would be but one-fifth as deep as at present, or one-half mile. This is as near a correct estimate as a hasty calculation affords.

Now if the water was but a half mile deep the crust of mica could be but about one-half of that, for the only necessity for any thickness of mica was to bear on its surface an atmosphere and water. Every construction of organization on this crust was created of a current of the electricity passing out of this shell to the surface, and every construction of such creations was allowed an equivalent amount of conversion of the crust into the influence that was being appropriated to do the constructing. No loss or gain was permitted.

In the construction of a coral or coral island, there was merely a consolidation of a current of electricity that came up through the crust of the earth, and as much of this influence was created by the decomposition of crust as was employed to construct the coral. From the interior to the exterior of this crust of mica a current of this constructor passes, and it decomposes a part of the crust at every moment. This decomposition of crust is the means for creating the "sodium" of the ocean.

Let us now consider the cause of the construction of granite.

This useful article is in all respects as much a coral substance as coral rock, except that in the mass of the rock there is interspersed a considerable amount of mica flakes about as large as a lily's stock. The dark particles are only the more burned particles of the mica and coral, and they are less in amount than the white portion of the coral, because only the smaller particles of the coral and mica were decomposed. All that gives granite its gray or yellow or reddish color is the decomposition of the coral by heat. The difference in color is a consequence of the difference in the extent of burning. The so-called "bull's-eye" of some granite is a result of the pressure of the contraction of the rock upon the more burned particles. This exhibition of a gathering of a substance into a body in a contracting rock, is the complete explanation of the existence of gold and silver and all other solid metals in quartz.

Every particle of mica that is burned in the act of pressing will be attracted to another burning portion. In this collection of similar snbstances in the course of a chemical change of the substance, is another operation of magnetic attraction. A process called endosmosis or exosmosis is the one operated. A garnering of the same substances indifferent localities by their mutual attraction.

Around all such accumulations of similar substances can be found a complete verification of this fact. It will consist of the absence of the mica.

These hornblendic constructions in granite would have been rendered gold if the pressure had been as great. They would have been silver if the mica had been rendered chalk before the pressure commenced.

Let us wait for a reply to this discovery of the construction of gold. It will come from the United States mint when a hundred persons have sent badly constructed gold for coining.

When we are justified in giving a description of what will create gold it shall be read by our readers.

Now a granite boulder is so useful for building purposes, that a provision was actually made for scattering them over a country.

What a daring declaration this is!

The only thing that gave our world granite boulders was a combining of all their parts in a crater, and the tossing them out on the mountain sides.

Every one who has seen a granite boulder on the earth's surface has seen a work accomplished by a volcano, in puddling a mass of coral and mica.

The only reason that common lava is not granite is because the sides of the crater in the mountains that produce it are so burned by a long period of the current's outflow that a mere scoria is sent out. Only from the earlier action of the considerable volcanoes have boulders come, and for the reason that they were only a mass of coral and mica when their discharge commenced. After the coral and mica were decomposed to a great extent a mass of scoria would be thrown out of the volcano.

The reason why the crest ranges of mountains did not throw out boulders was because their craters were so large that the action of the current could not construct boulders, or throw out their substance, as a gun does a charge.

The ocean of substance in them would not permit a discharge of small objects of such a character. We ask the reader to obtain a geological authority and ascertain the locality of boulders. See if one can be found except in the proximity of a mountain or range of them of a secondary height, or if one can be found on the sides of the crest ranges.

The other kinds of rock are such as have been decomposed more than those we have described. They consist of limestone, sandstone, marble, basaltic columns, and the approach to rock called chalk.

Let us dwell on each of these for a moment.

The many kinds of rock described in geologies, and which possess slightly different characters from what are known under the above titles, are all of one common origin. The difference in them is due solely to the difference in their decomposition, and this difference in decomposition is due to their age. Conglomerate is only a chemical composition. So-called sandstone of commerce is only a coral fringe so greatly decomposed as to lose its rocky character. All such beds of substance are elevated courses of decomposed coral only. On the slopes of many small mountains a sandstone is discovered, and when dug to a little distance it becomes blue stone or trap rock. On the top it is soil. The only thing that has rendered sand and soil parts of the range was the current of all the decomposing that has ever taken place. A gradual approach to rock will always be discovered after sandstone is disclosed. No sand is

ever allowed to become rock, except by the aid of a crystallizable substance. The decomposition of all things on the face of the earth or in its crust is the law, and sand is no exception. All sand is a result of the decomposition of rock. The great deserts of the world are gradually having their sands converted into soil, and every oasis is the accomplishment of such a work. Every peat bed is another, and peat is but more decomposed soil given a dark character by the continued accumulation of burned plants. The great prairies of our country are but enormous peat beds, only partly filled with the debris and coloring of plants. Peat is only a considerable quantity of plant charcoal and coral charcoal.

The so-called sandstone on which so many footprints and other evidences of the existence of animals of long ago exist, are but the mere acmulations of a conglomerate amount of sea weeds and ashes and decomposed coral. Every one of these witnesses of the existence of animals, is given by a pressing of an object of one of these characters upon what is converted into a conglomerate. The same process was employed to construct conglomerate as is employed in constructing stone in a bladder. The decayed plants and animals furnished the nucleuses for all such figures as are seen within the stone. The soft amount of substance, when in the process of condensation, captured all the so-called fossils of the interior of rocks, and also the impressions of feet claws and all parts of the animal or plant that could effect the condensing substance.

If a doubt is entertained of the truth of this explanation, it is only necessary to observe the character of all rock that contain such affairs. Only a mere operation of crystallizing created all rocks that contain such fossils. The fact that only upon a beach of a sea, or its warm tributaries, are such impressions found, is another proof of the truth of what is stated. Only in warm places and where the plants and animals were decomposing and creating both slime and the necleuses for fossils could a crystallization of the finer parts of the sand take place. All that enabled our world to possess chambers of the descriptions of the animals and plants that have existed in past epochs was this philosophy of crystallizing.

In caves and in mud of recent periods of continents and islands there are frequently found animal and human skeletons, and they are a small contribution to our knowledge of what the earth has heretofore possessed, but these catacombs of a few species of creatures, who were compelled to seek safety in caverns of the earth, as foxes and small animals are doing now, or were unable to extricate themselves from mud, are able to testify only to a few facts. Their experience when in existence was so comparatively limited, their testimony is not to be given but a small amount of credit. The archives of the great receptacles that have been filled with water, or given a construction of the character of rock, are able to speak with certainty upon the whole period of animal existence, and this chronology is analogous to the fossils of the human brain, which consist of the footprints of thought. On the enduring stones of a warm shore are deposited the ever instructive record of an experience of a world. On the immortal consolidations within the brain of a higher organization are deposited the ever instructive records of a human life's experience.

The world of humanity is able to examine what a ventricle of the earth contains. A world of souls is able to examine what a ventricle of the human brain contains. A soul is obliged to observe what is recorded in its own chamber of chronology.

The limestone is merely a trap rock converted into a species of chalk. Every atom of chalk on the earth can be made limestone again, by decomposing it a little more. The many drenchings of chalk by water were all that rendered it unfit for quick lime. The world is taught by the scientists that chalk is only a great quantity of shells of the character worn by rhizpoda, and that chalk is a work of all these insects. The proposition is given credit by the claim that the atoms of chalk are such shells and what have been broken. The whole sea bottom is covered with these shells, and ever has been, and without chalk being produced. The chalk is existing both above and under the water from Scotland to the shores of the Caspian Sea for a width of several hundred miles in a northeast and southwest direction, and on a small portion of the coast of France and Spain, and in our country over a small extent of a county in the west of Kansas.

Nowhere else does chalk appear. It does not exist anywhere else, and diligent search has been made for it in the ocean and for the purpose of establishing a bad theory.

If the shells of rhizpoda constitute chalk, what has prevented chalk being created on every

part of the earth where a sea has existed? Of course the answer will be given that chalk is only a greater decomposition of limestone.

In the basin of the continent of Europe where chalk is found there is a mere conversion of limestone into this substance, and the age of this part of the earth was all that permitted this work.

From Texas to the Caspian of our continent—Lake Superior—a similar condition of decomposition of coral exists. At a point in Kansas it is sufficient to create some chalk, and this condition of a part of the general stretch of the coral decomposition is but an effect of the more rapid discharge of the current of electricity from the earth that is so faithfully constructing as well as decomposing all things on or in the earth. What a comment on a century of scientific calculation as to the character of chalk! All that constitutes a difference in the soil of any country is the difference in the decomposition of the coral basis of all soils. Let every farmer understand that in the age of his existence a character of soil is constructed corresponding to such age, and if the turf under his feet is dark, and well calculated to produce growth, he stands on a plain as old as the great globe of our existence. Only a short period of time was required to produce the first coral atolls, and these atolls are the oldest soils of the world.

A word upon the curious affair called marble. Scientists state that marble is limestone and mica. They do not disclose the means of its construction.

What could create such a beautiful mingling of coral sand and very small scales of mica? So small are the scales they cannot be detected with the eye, unless it is at night, when a candle is rendering them as brilliant as diamonds. What could have given them so fine a cutting, and what could have given the coral so clean a condition of sand? Wherever marble is found immense mountains are found, and the marble is seen on their slopes, and often at a considerable distance from their bases. The granite of the earth is always in proximity to the marble. Now if marble is limestone how did the fine scales of mica get into it? Let us also ask how fine scales of this substance got into granite, if it was not obtained as we state. Mica cannot be found in scales in any rocks except granite and marble. Let us see if a process of exactly the same character as produced boulders of granite did not operate to produce marble. Where the marble beds are found there is a great quantity of slag of this substance, and it corresponds to scoria of the volcano.

A whole stretch of it can be found beyond the limits of better marble in the same directions as the stretch of the mountains.

Now all that gave the State of Vermont or any country its marble was a puddling of coral and mica in the craters of the great mountains of such countries, and instead of its being tossed out to scratch the rocks of the mountain sides, as boulders were, it ran down as lava or scoria does. All the scientists of the earth are challenged to deny this statement. The color of marble is but an evidence that part of the coral was burned. The only difference between marble and granite is in the size of the scales of mica.

Look at each. No other difference can be detected. The so-called "bull's eyes," or congregations of hornblende in granite, does not appear in any of the specimens of granite that are found where the climate is warm. Only a quicker cooling produced them. The same garnering of decomposed mica can be found in every corner of marble that is very dark, and to which several streams of the approaching substance are seen to have been coursing.

These streams were stayed in their course by a halt in the pressing of the rock. On the banks of the Jordan there is a white marble as pure as the good soul who was baptized in the Jordan's waters, and this condition of its whiteness was produced by the warm atmosphere of that old country.

So did all marble acquire its purity by a warm season of contraction. All colored marbles are only more tightly pressed common marble.

The action of continued contraction is the pressing contrivance; all marble and all granite will one day be black. The sands of their endurance are measured, and on the tablets of their hornblende are inscribed the epoch of their decay.

All the other substances of the earth of a mineral nature, which have not been mentioned, are explained, when it is added that each one of them is but a greater degree of composition of chalk. In this extensive substance there is still existing the coarser coverings of the cells of coral. In the white and finely pulverized substance from which a score of metals are produced, these coverings of cells are gone to the realm of oblivion. A companion-

ship can be found in the theories of the character scientists are giving many things, and which are to depart for the same locality.

Now if there is any rock or metal or composition of the crust of the earth that is unorganized and not explained in this article, we will explain it when its existence is pointed out.

We can close our article by a few remarks on the geyser, the magnetic needle, and the origin of plants.

When the article comes into the hands of our patrons, we ask them to give it to other persons capable of understanding what is stated.

Geysers are the spouting of the force of the earth's current, where a hole is constructed in a volcanic condition of rock, and the water that is thrown out. Every geyser will describe the pulsations of this force, and the pulse will be frequent or slow, according to the character of the country they are in.

The earth is nodding its axis every coursing of the moon, and every revolution on its axis, and this motion is giving the current of electricity that is passing into the earth a pulsating motion. If a geyser is at the north of the earth it will pulsate as fast as the earth is nodded at such part, and if it is at the equator or below the geysers of Iceland it will spout as rapidly as the pulsation is affecting the outflow of the current at such places. Only a disturbance of the general flow of the current is producing the jetting of water at geysers.

The water is obtained by a leakage through the same broken coral mass that is uplifted in the mountains. It comes in from either sea or lake or brook. The so-called dissipation of water in lakes having no outlet is only a giving of such waters to the underground channels of escape. The salt of such waters are produced as ocean salt is, except that their "sodium" is obtained from the volcanoes of adjoining regions.

We can devote but a word to the magnetic needle, for a word of explanation is all that is necessary. The readers of our paper are by this time acquainted with the character of the great current of electricity that sweeps into and out of the earth.

A magnetic needle is obeying the coursing of the current merely. It will lie in the stream of electricity as a stick lays in a stream of water.

It will dip as a stick will dip when the current of water is raised at one end of the stick faster than at the other.

The shape of the earth's current of electricity can be demonstrated by placing a half circle so that one end can touch a ball at its equator and the other its pole. Then with the other half (if it be a ring cut in two) repeat the operation by causing the South pole of the globe to be touched with one end of the half ring, the equator by the other. A magnet needle at the equator or poles will by the flow of this current be compelled to point its extremities upward and downward, so that its position will cross the current. Only a more rapid rise of the current at the equator produces the opposite tippings on each side of the equator, and for some distance away from it. At the poles, exactly the same operation takes place, except that the direct approach of the current to the earth at such places will cause the needle to stand erect. If there be no long continued winds, and no friction of consequence at the bearings of the needle, there will never be any other motion of the needle. A long continued wind is sure to cause a swaying of the current and needle both.

The inequailty and diversion of the magnetic meridians are due wholly to the greater attraction of continents and great islands for the passing current. A glance at an atlas of such deviations of the point of the needle will at once disclose this fact. Wherever there is the greatest outflow of the earth's current there is the greatest attraction.

Now, the explanation of the cause of the existence of different orders of plants is so easily given it can all be written in a single paragraph of this closing article. Every plant is a copy of a design which was prepared in the unfoldment of plants in the ocean. No plant exists on the land that did not exist in the water. A greater degree of development is all that has been obtained on land. The plant seeds of the algæ of old ocean were the germs of all plants on the continents and islands. These seeds consisted of a coral sprout of the plant started upon coral rock, and if it started on soil it was merely a partial coral, a sea weed, or other marine plant.

Every plant is constructed from a sea weed, of a character as much developed as the flow of the ocean and temperature of its water would permit.

Now all that has given us the great variety of plants in the world was the preparation of soil for a greater development of a sea weed. If a coral only grew out of the water it was able to possess leaves and even blossoms. It ceased to be calcarious. All coral fringes are more or less

adorned by the plants which are only the same corals grown out of the water. Each degree of latitude will possess only such plants as are able to grow in such soils and climate. So are the same plants grown in the same temperature of water and on soil of the same nature under the water. The difference is only in extent of development.

For the genealogy of plant it is only necessary to find its counterpart in the ocean. It will be sure to have the same appearance as a plant in the field. When this is obtained all that is necessary is to detect resemblance of plants in order to discover their steps of devolopment. Of all the curious operations of nature there are none so curious as the diverging and unfolding of plant species. Every plant is allowed a departure of its course of unfoldment. When a species has given out a fruit of any kind, it will commence a gradual change of its character. The only cause of this is the more rapid growth of the plant from this period. All that changes the character of any plant is its more rapid growth. A better soil and warmer atmosphere are the meams for increasing the rapidity of growth.

We must refer our readers to our work on plants for a discussion of plant growth. In the coming numbers of the paper we shall disclose the genealogy of all the principal plant species.

No one method of plant growth or unfoldment has ever been given the world by scientific teachers.

The greatest surprise of anything yet offered in this paper will be obtained in the work we shall give on plant genealogy.

This article will close by the remark that a world of facts and of law are within our reach, and to the most infinitesimal object and to the whole world of grandeur the finger of God is pointed, and it commands us all to look and learn.

OFFICES OF ELECTRICITY IN THE SOLAR SYSTEM.

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Chapter I.

On all the span of the sky, from the extreme north of the stellar creations to the extreme south, and from the horizon on the east and west, there is at all times a presentation of globes of which the universe is constructed, and in what are capable of being seen with the assistance of telescopes, there is a most extensive and enormous panorama of celestial wonders.

As far as we are able to obtain any understanding of such creations in the books of the authors of astronomical explanations, there are but a few glimpses of the actual character of the construction or the philosophy of operation of these celestial orders of nature.

When this article is completed, it is our belief that every problem of such creations will be explained.

On every span of the horizon, and on every point of the arch of the sky, an index is observable of the methods of creating, and the purposes of existence, of each, and all of the stellar and cosmical bodies.

On the blue vault of the heavens in the day and at night there is a chance to discover what the universe is constructed of, and what it is constructed for. The evidence of the truth of all the propositions that are to be advanced in this work is to be found in a careful tracing of natural operations of a force and the result of such operations.

The evidence will consist of nothing but a complete description of the operations of a common force and the products of its operations.

When these phenomena are perfectly described every person of any considerable intelligence can understand what is stated, and be perfectly satisfied whether the description is correct. It is impossible to describe any work of nature when it is not understood, and if it is understood the description will be correct. Every intelligent mind can be convinced of the want of a writer's understanding in perusing a single page of his composition. Every unintelligent person is as likely to think it error as truth.

Now, when we are through with this greater task than any yet performed in this paper, it is merely asked that the reader consider what is given him. No desire exists on our part to convert any one to the ideas to be presented.

It is a fact that the article will stand or fall as it is true or untrue. No advice or wish of the writer will render it any stronger.

No proselyting of the subscribers of the paper will add to its final fate. We do not desire that any person give a word of confirmation to what we shall state. It is our wish that the article stand on its merits only.

We desire that every one who reads it will give it a silent reception until a world of scientists speak concerning it.

This most wonderful and glorious order of worlds, with its concomitants of comets, stars, and patches of light, is the universe itself.

All that ever was observed in the space around our earth at whatever distance, was and is within the so-called solar system.

In giving a description of these objects we shall only describe a solar system. In giving a cause for the motions of each and all of these astronomical creations we shall describe a common force connected with a common centre. In explaining the purposes of each and all such affairs we shall explain the purposes of a solar system.

In giving an explanation of the origin of stellar substance we shall describe a mere common mass of very refined influence. So comprehensive and at the same time most simple organization of the system is only a product of the moulding of several orders of worlds. In the experience of our astronomers, only a mere glimpse of the general character of the organization has been obtained.

In what is termed the Copernican idea of this organization there is found a correct conception of the position and direction of motion of the sun and planets. No more understanding of the system was obtained from the greatest of astronomical teachers.

In what is termed the nebular hypothesis, a partial conception of the processes of creation is obtained.

All that has prevented this conception of the means of creating the whole order of worlds from becoming perfectly developed, and quite

competent to explain the whole *modus operandi* of construction has been the want of sufficient talent on the part of astronomers.

Even the talent which has been possessed by those undertaking the investigation of astronomical affairs, could have completed the work, if their minds had not been so handicapped by the foolish theories obtained when only the grossest bigotry enshrouded the world.

From corner to corner of all civilized countries a constant obligation was imposed upon the scientific minds to regard the few dogmas of the teachers of note of a previous generation.

On all such shoulders a mere blind board was placed, and the board of obstruction is to this day clouding every mind that is laboring in the direction of the affairs of nature.

To this great idea of the two persons, who were too comprehensive in contemplation to give credit to a proposed miraculous origin of worlds, the world has given almost a complete assent. It is so agreeable to the scientific mind to cut loose from the shameful degradation of the old ideas that a world is a miraculous creation and whirling in obedience to a command of a miracle of creation, that when a teacher of world-wide note offers a chance for an escape from this degradation, a whole army of such worshipers clamber through the hatchway.

The chance in order to be seen by them must be pointed to by a great author, and a gap as wide as a world, if pointed to by one of no note, would be overlooked.

In the few glimpses of stellar philosophy obtained by Newton, a considerable degree of wisdom can be observed. This proud and worshipful courtier of a proud old nation was able to discover that a power of common operations was causing a world to bow to an approaching neighbor and recover its position after it had passed.

He was only mistaken in the name he gave to this power. His greatest achievement was discovering that a ball could pass continuously around a central body (if some power continued its motion) in a circular direction, and this wonderful fact could startle the entire scientific world at his period.

Let us undertake to disclose the very process that gave us the world, and the whole universe to who ever created it. As certain as a plant is given an existence only by a process of growth, the solar system acquired its existence by a process of growth. We mean by growth a creation from a substance unorganized. All organizations were possible only by a process of development, and a world or solar system is no exception.

On every square mile of soil there is a piece of the original substance of the globe, and in this atom of earth a substance is found in all respects like the substance originally possessed by all other worlds. Only a difference in development constitutes the difference in condition between any two bodies of the solar organization.

Each of such bodies were originally only transparent globes of condensed electricity, as pure and brilliant as a diamond, and of far greater transparency.

We desire the description of the original condition of all globes to be obtained by the reader before uncovering the common and all competent method of creating a world. The best example of a world's original condition is a perfectly clear glass bead without holes in its sides.

On such a speck of our own constructing there is a chance to comprehend all that was ever constructed in order to allow a world an existence.

A mere ball of mica as plain and simple as a thing could be and as gorgeous in beauty and brilliancy as the object could be. It will be seen, when the solar system is described, that a countless host of just such constructions are glittering in the sky at this time, and we shall startle a nation by forgetting the homage paid to old theories of the authors of science, and disclosing the fact that every star and asteroid of the heavens is but just such a gorgeous body, and that it glitters only because a sun ray of electricity is giving it brilliancy in precisely the same way it gives a common diamond brilliancy. We shall also startle a whole people by pointing to the evidence of this fact to such an extent that it will be, before along, accepted by the entire nation.

We shall offer another surprise in the statement that, in the vast arch of our sky only just such things exist as a globe of mica and what it can produce when acted upon by a current of electricity. On each great vault of this celestial dome there is only a condition of mica as pure or impure as a current of a decomposing influence will permit. The whole sky is only a play card of the operations of electricity upon mica crusts. On the grand aspect of the sky every night a grand aspect of Almighty wisdom is seen, and it is time a human mind could account for the wisdom that is displayed. In each

curious display of a comet there is the vice gerent of a Controller of a universe, in the work of giving orders for a century of unfoldment.

These sweeping messengers of a greater sweep of a current of this agent are the promises of a great epoch of progress to each world around which they sweep in their partial circuit of the sun.

On our atmosphere at night a promise is observed of a similar character in the small sweep of a tiny meteor. Only a clearing of the condition of a globe is ordained in the provision for these condensations of an accumulating current of this agent.

In each day of our world there is but a sweep of a planet around a centre that has never been discovered. It is to be discovered in this article, and another surprise offered the already startled community. This whirl of a globe around a centre of no material substance will be apt, if observed, to overthrow a theory that claims that only an attraction by the sun continues the circular motion of the planets around the sun.

It surely takes place, and it will be so plainly established that it will receive as little denial as the other propositions we have advanced. In this description of a whirling of the earth that was never thought of, a whole combination of wonders will increase the astonished people as they are disclosed. On the wings of the coming day there is to be a perfect solution of this system of worlds. It is only a want of assistance in the dissemination of the work we shall publish, that will prevent its disclosure becoming known throughout the world at once.

On each of the patches of light that are studding the whole course of the heavens, only a halo of ordinary illumination from a multiplicity of shining stars is seen. Each of such patches of the crescent of the sky that is capable of being seen at one time is giving us a chance to see a construction of light that is capable of being dissolved by a clear observation of it. When a current of electricity in the atmosphere is vibrated to any considerable extent it will produce a light. This is all there is of what is called sun light. The extent of the vibration is the dimension of the light, and the intensity of vibration the degree of illumination. When from any cause the current of electricity is vibrated a light corresponding to the intensity of the vibration is produced. In a milky way, or so-called patch of nebula, there is a great stretch of moderately vibrated electricity in the atmosphere above us.

It all disappears when the current is observed through a glass powerful enough to an-analyze the current. This is done solely by giving the observers a chance to detect a space between the vibrating currents. Every patch of this character of light can be resolved into darkness, except the amount of stars beyond it, if the glass is sufficiently strong.

We want the reader to note that in all such affairs there is but a great sweep of the earth's electricity in a state of agitation, and that the cause of it is simply the operation of the greater light of so-called stars extending its influence to near the earth, and part of it quite to the earth. All that prevents us seeing all the stars that contribute to this light is the fact that their light can accomplish no more than a creation of a haze at a considerable distance from the stars.

The light of each great body of the solar system is of an entirely different character from any other that is observed.

Such light as is seen in connection with a planet or moon, is a creation of exactly the same character that is seen in any electric light, where opposing currents make a flash of such conflict. All there is of the so-called light is a clash of the current of each body with that of the sun. The same operation takes place on the side or sides of any planetary or lunar body that discharges a current of electricity in a way to conflict with one of the sun.

On one or more sides of each of such bodies this phenomenon occurs. Each operation will be carefully explained as we proceed in the systematic description of the creation of the solar organization.

These scattered objects are here adverted to merely to give the reader a preparation of understanding for the work that is to follow.

We can now commence a methodical description of the way a solar universe came into existence.

Let every one who sees what is stated give us as careful attention as possible, and if they will do so, we promise them a complete disclosure of the entire process of the construction of this organization, and of every phenomenon connected with it. It shall be done in a manner so plain, and with such simple terms, that a child can understand what is stated.

In the commencement of our task of delineating the process of this grandest work of nature

it is a duty first to state that we can commence only at the door of the organization.

Beyond the description of the transformation of a whirling vortex of electricity into what is now existing in the great order of stellar creations, we do not pretend to go. What the vortex was before it commenced to move in an elliptical form, or what the Calculator of the plan of the work to be performed was, we are as unable to state as the infant or savage.

A child can be impressed with the idea of a good and wise Being as the author of all that is seen in nature. We are as little capable of obtaining any other idea, although we may see method and design in His work. It is a fact that in all the affairs of nature an understanding can be obtained of the purposes as well as the methods of such creations. Such an understanding does not afford a clue to the actual character of this Being or the means of His existence; nor does it disclose the origin of the influence at His command.

It is absolutely shut out of the sight of the children of our earth, and it is in all respects a question of speculation as to such origin. When the good order of the whole affairs of creation are understood this panoply upon our sight may be removed. It may never be removed. At any rate it is at present as complete an obscuration of our capacities for discovering the Author of creation, and the construction of His good agent, as a panoply of darkness can be. The whole earth is as absolutely shut out of any communion with its Author as it would be if it had never been called into existence.

Let us dismiss this subject and commence what is within our power to accomplish.

In each orbit of the great system of planetary motions, there is what discloses a commencement of the whirling of a great mass of only electricity. Each orbit is shaped as much as this mass of rotating cosmic substance was shaped as it could be with but two dimensions—length and breadth. If there was a measurement of the width of such orbit, by a creation that denoted an original extent of the mass of original cosmos, we could point to the entire dimensions of the orbit of the outer body of this system as an explanation of the great order of substance that was converted into the system of worlds.

We are without this consistent assistance, and can only conceive what a mass must be in form that will by a process of moulding arrive at a class of bodies of the character and motions of the planets. All the device for converting a whirling mass of condensing influence into such objects that was employed, was merely a constant motion in the same direction, and a constant operation of condensation.

This simple operation affecting the condition of such a substance, capable of a general change in its condition, gave the universe its creation. On all the aspects of this system, an unmistakable character of evidence of this work is seen. It is observed in the shape of every orbit, and in the motion of each body, and the shape of each object that is constituting the galaxy of stellar creations.

Each smaller system presents merely a copy of the greater one, and all the greater contains is capable of observation in the smaller. This grand array of stellar wonders is but a complication of universes, each one exactly like the others. There are the same objects in each smaller system that there are in the greater one, and in the greater there is no object different in character from those in the smaller. As much alike are the bodies of the whole catalogue of planets as the cells of any animal or plant are alike, and as much like the planets are the moons and stars, as the planets are like each other. On the broad expanse of our sky in the night, a perfect copy of the whole solar system can be seen through a moderate telescope. Old Saturn, with planets in the form of moons, and the three rings of stars around it, are there in all their glory, that mortals may have a peep at a whole system, only greater, of which this beautiful example is a part.

Now when this great order of worlds are fully explained to the reader, let the reader be sure and get an opportunity to observe this copy of the solar system.

Only a perfect model of the universe can be seen, and it is the most bewitching of all objects that are constructed by the will of the Almighty.

In each ring of this smaller galaxy of worlds, you can find a copy of such creations as are giving our firmament a studding of actual diamonds. Every star in the sky is as perfect a diamond as could be constructed, and they differ from a diamond of our acquaintance merely by being round and hollow. No work called crystallizing has occurred in their construction. Only a hollow ball of the same material precisely as you see in the fire-board of a furnace of late pattern is seen in any star or asteroid, in the dome of the universe.

Let us again present this fact, and let us here add that in the fall of what are called aerolites, there is precipitated to the earth one of these so-called stars. Every one of these diamonds is being decomposed in the artery of a circulating current of electricity in the solar organization, in just the same way that a corpuscle of the blood is being decomposed in a current of the same influence which passes in pulsations through the body, and taking water filled with corpuscles with it.

Only a difference in the size of the corpuscles of the organizations exists. The corpuscles of the solar organization are only as large in proportion to the whole organization as those of the blood are to the body. Each one is merely a hollow globe created by a condensation of a part of the electrical current in the organization.

Each star is being operated on in the same way a corpuscle of the blood is, and is as certain to be burned up.

Now will the reader pay particular attention to the next few sentences. The glitter of a star is the effect of a striking of a current of electricity of our common sun upon the surface of the star, and the glitter is of the same character, and of as many colors as the glitter of a diamond.

When one side of a star is burned through, a collapse of the shell takes place, as when any distended construction is insufficient to withstand the pressure of the atmosphere upon its surface. On such an affair taking place a star becomes so condensed as to be attracted to the earth. It is only where a ball of mica cannot be sufficiently attracted to the earth that a star is poised. The same philosophy controls the star in its sphere in the sky, that controls the elevation of a balloon.

When a collapse occurs the substance of the star is united, and becomes so condensed as to be attracted by the earth's influence.

It is then swept from its pedestal, and plunged from one sphere to a lower one. In falling it is given a velocity capable of igniting it, and frequently of bursting it. The ignition is for the purpose of preventing peoples heads becoming broken by this precipitation of an *astronomer's* wonderful sun of a distant solar system.

No velocity is obtained capable of exploding a falling "sun" unless it is so large it cannot be burned all up without a division of its bulk.

Now, in this explanation of what has for many thousand years given the human family an unsolvable problem, will for as many thousand years be accepted as a final disposition of the problem. Do not mistake what is stated—a final disposition of the problem. Whenever a star of the wonderful system of the human body is burned on one side in the current of the blood, a collapse occurs exactly like a collapse of a great "sun," and the collapsed corpuscle is given a flat condition, which renders it capable of being attracted by another exploded corpuscle, and it comes to that one, and other collapsed corpuscles come too, and the chain presents a union of flat corpuscles exactly like a union of coins when slid slowly from the hand upon a table.

One more surprise for all who will see this article, and our first chapter is closed.

On the arch of the sky, astronomers have made two imaginary points, called equinoxes, to designate the sweep of the so-called sun in a year's time. The first is called summer solstice, the second winter solstice. They have discovered that the so-called equinoxes, are not quite up to the equinoctial points, at the end of the year, and that the earth in a year is given a passage backwards as well as forward, (if our readers can understand that) of about fifty" as the cluster of stars at the equinoctial points has actually become that much farther advanced in the period of a year.

This deficiency of the race of the earth in its course around the sun, is called the precession of the equinoxes, which means that the equinoxes are retrograded fifty".

All that has occurred in the year so far as the equinoxes or stars are concerned, is the coursing of the whole body of stars around the earth to the extent of this difference in the star and equinoctial points during a revolution of the earth. Only a general march of the stars around the earth (as the moon is coursing) to this extent, is all that ever gave any foundation to the shocking claim of scientists that the whole solar system is whirled around a greater one at an infinite distance away. As certain as these words are being written, in the slight advance of all the stars around our earth, a whole world of scientists are claiming proof of such a whirling of our solar system. The time for this prodigious whirling to be accomplished, according to the calculation of the astronomers, is a little over twenty-five thousand years, and it is based upon the multiplication of the seconds of the circle that the equinoctial points precede the stars or recede in the ecliptic in a year. All that has caused such a preposterous proposition to be advanced or

believed is the fact that a whole ring of stars is carried around the earth in about the time the solar system is said to be whirled around the imagined universe of similar systems.

The same influence that causes the moon to pass around the earth causes the stars to pass around it, and all that prevents the stars making a revolution around the earth in the same time the moon performs one, or in a shorter time, is the weakness of the earth's current of electricity at the point where the stars are located. Just as certain as the stars are moved slower than the moon, the satellites of Uranus and Neptune are turned around their respective planets in a direction opposite to the rotation of the planets. Our planet would whirl its moon in the same way, if the moon was far enough away. The retrograde motion of the satellites of these outer planets are only produced because the current that is coursing around each of the planets is producing an influence upon the surface of the satellites presented to the planets in a way to turn them backward to the general motion of the system. The current is too weak to cause a motion of the satellites, as in case of our moon. Every planet and moon, except the moons of the two planets mentioned, is going around its central body at a velocity in proportion to the strength of the current that causes its revolutionary motion. In what is known as the three laws of Kepler, or the theory of gravitation of Newton, nothing is disclosed but the fact that every body can attract another body in proportion to the strength of the currents of the two bodies, and that the sun and planets will cause the dependent bodies to sweep in the direction of the currents of the controlling body as fast as the greater body's current can move them.

As we disclose the process of constructing all such bodies, this fact will be more easily understood. In the following chapter a still greater surprise is to be given the reader.

We desire the whole country to criticise our statements, and if we are in error we will admit it.

CHAPTER II.

Let us advance another step in the description of the creation of worlds. A simple delineating of the process of converting a whirling mass of condensing influence into other conditions.

A current of any fluid is capable of being moulded if it is constantly condensing, and it will be moulded if it is operated upon in a way to convert it into different forms. A ring of such condensing substance cannot be so cornered as to effect a moulding of its body, for there is in a ring wholly circular no means of acquiring any other form for the substance. A constant coursing is only continuing the circular form of the body of matter. Every one is informed by the astronomers that the orbits of the planets and moons are elliptic; that the sun is nearer one end of a planet's orbit than the other, and that a planet is in a similar focus of a moon's orbit; that a coursing of all such bodies brings them closer to the central body when they pass over the orbit at the end nearest the central body. No explanation of the cause of such a shape of an orbit is given, except the proposition that in the attraction of the sun a difference in the velocity of the revolution of a planet is produced, and that the effect of this is to turn one extreme of the orbit in a way to close the sun around at a less distance from the sun than the revolution accomplishes at the other extreme. Every part of this proposition is a mere scapegoat character of explanation, and there is not an astronomer existing who has any faith in it. All the distortions of the work of attraction invented by mathematicians in their methods of calculation to establish this fact can be overthrown by a common scholar. All that an attraction can do under any circumstances is to pull a body to another, as soon as a greater attraction or counteracting power is overcome.

No further discussion or proposition is needed to destroy all the fabric of sophistry concerning the power of the sun to attract another body.

All the proof of the error of the Newtonian theory of this work that even an astronomer will want, is the bare statement that it requires several days more for the earth to pass through the winter solstice than it does for it to pass through the summer solstice, and that the inequality of these solstitial periods is due to the fact that the portion of the orbit passed through by the earth during the winter solstice is broader than the other portion. Of course if it is the earth requires more time to move through it. Let us be distinctly understood: The end of every orbit that is closer to the central or primal body is broader than the other, and the orbit is shaped exactly like an egg of a hen. In this

statement the people are informed for the first time in the experience of the world what the shape of an orbit is, and in the next sentence they will be informed for the first time why an orbit is of this shape, or more pointed at one end than at the other.

This shape of an orbit was calculated solely for the purpose of cornering a coursing mass of condensing influence, as it passed through it, and by which means it could be moulded into a world. Every planet and moon was moulded into a globe by being gorged in the narrower point of its orbit, and controlled in its orbit on all sides by a construction of exactly the same character that covers the front of the eye of every living creature. Only a gorging of the substance in the gorge of the orbit converted a mass of soft mica into our globe.

Great and celebrated scientists of the past thousand years, what have you accomplished in studying the heavens? Look at our simple tracing of the entire work of the creation of the objects of the sky, and when it is seen you can close your observatories and your books and charts, and give us a little credit for deciphering a process of creation of which the world is perfectly ignorant now. We shall be so particular to be correct and so plain in our statements that a little child can understand us, and when the explanation is given a person who sees it can stand upon his door step on a clear night and comprehend the whole firmament. We shall not wait one hundred years for a reader. The Almighty has waited much longer for a describer of this work, but the same Being commands that no greater delay shall take place.

Let us advance another step. When we have taken a few steps further a whole community of persons can accomplish the balance of our work.

On the bow of twilight there is a view of the very object that enclosed our earth's soft substance on one side, when it was being moulded in the point of its orbit.

As certain as a world exists the object that is called the zodiacal light is only a better presentation of this twilight bow, and it is a perfect copy of a shore or sphere in which the souls of mortals can find their everlasting abode. We are not attempting to further an acceptance of any religious opinion or theory, but are simply giving a description of the actual creations of the good Father in heaven.

If we could see on the other side of our globe what a Chinaman can see, we should behold the other portion of the object that assisted in moulding our globe. Now the other side of this great and transparent object that controlled all the moulding operations of our planet is so far in the sky it can not be seen. The existence of it is established by the fact that a smaller planet is allowed to roll around the sun on it. We shall show this to be a fact as clearly as the people can see the zodiacal light.

Each planet in the great organization of such bodies is actually rolling on a foundation of this character. All the smaller planets are encased as the yolk of an egg is, and by a construction which is only a shell of mica. The whole encasement is rolled around the sun. The very awkward up and down motions of these smaller planets, so long a puzzle to astronomers, are produced by the shape of their encasements. Each revolution of the encasement lifts the planet into the sky. The casing is exactly the shape of a moon's orbit. This fact shall be again referred to, and the complete evidence of what is stated given. For the present let it merely be remembered that each of the smaller planets is situated in a shell of the same shape as that of the orbit of a moon, and that all that is in the shell is carried around the sun as the shell goes around it.

The people are soon to discover that in the solar organization there is as perfect an organization of all its parts as there is of the parts of any animal or plant in the construction of one of these lesser organizations. The whole organization is much less complicated than either of these small organizations and much more simple.

Another step in the description of the unfoldment of a great mass of consolidating substance shall now be taken. The only operation that took place to create the sun was the greater condensation of this mass of whirling substance at its centre. All clouds and condensing liquids will give an example of this character of motion.

When a condensation in the centre was obtained great enough to create a difference in the resistance of the mass to the current that was whirling it, the more condensed portion would move slower, and a separation of the mass take place. This operation of a division can be wit nessed in the ice of a stream where it is more packed in one part than in another. Every one of the loose pieces will rush on past the packed mass. If a reader has ever crossed a river containing a great deal of small pieces of ice an ex-

ample of this operation of law has been seen. Now, all that created our sun, the central planet of the solar system, was the loose portion of this whirling mass of substance rushing around the packed mass faster than the packed mass could whirl. How simple a work for creating so important a body. The packed mass, of course, would continue to consolidate until it became a ball of mica. The contraction of the mass, of course, would create a cell, as all contracting round bodies of substance do.

So well is the law obeyed that it can be found to be operated in every organization in nature that becomes condensed by contraction. Every crystal is hollow. Every cell of a plant or animal is hollow. Every grain of sand is hollow. Every bone of any considerable size is hollow.

Every shell of the ocean is hollow, and the heads of every animal and human creature contains a hollow.

This vast planet, the sun, is exactly like our earth, except in size. The work of its construction was precisely the same as that of the earth after the substance of the earth acquired a spherical form.

Let this be remembered, and in what there is to be said there will be a chance to discover why our earth became a ball of mica. As sure as this article is seen, the evidence will be found of a world of only a mica shell. In all the condensations of this substance only a shell of mica was the result, and the reason for the stars being sporadic constructions, of such shells, was merely the ability of a thin ring of the substance to pass the gorge of its orbit without being huddled into a mass. Precisely the same effect of the free passage of a small ring of substance through a contracted channel took place in the case of the stars as is every spring seen in the unobstructed flow of pieces of broken ice through a gorge in the river. The appearance of stars in groups and clusters, is due solely to the condensation of portions of such a ring, in different parts of the ring, and a perfect copy of a flow of small pieces of ice after passing a gorge can be seen in the groups and single existences of stars on any clear night. The reader must not fail to look and discover the truth of this statement.

On the broad heavens at night the stars are presenting a great ring of these small globes in groups and without clusters, and it extends from east to west around the globe. The stars at the north and south are the edges of this ring, and are so few that a peep through them is possible.

Now, we are ready for another step in this work of description. We have seen how the good sun was constructed, and we will now see what else was constructed by a similar operation. In the pathway between the first planet from the sun, called Mercury, and the great Neptune on the outside of the system, there is a monster globe called Jupiter, and it is the largest body in the system, except the sun. Now, what could make this body so large at that distance from the sun? In the consolidation of the sun the greater part of the whole original mass of substance was possible, and it can be seen to be absolutely a fact that any liquid body capable of consolidating will, if in motion, create a central body of the greater portion of the substance. It is seen in the work of a whirling kettle of soap, or glue or any condensing amount of substance. Even oil, if allowed to become consolidated, will obey this law. So will sugar or salt or roil of water. This is all the explanation necessary of the cause of the greater size of the sun.

Now, when the sun was detatched from what was whirling around its substance, a prevention of the further condensation of the outside substance in the direction of the sun was caused merely by the greater velocity of this portion. Its greater velocity overcame the influence of the sun's attraction to such an extent that this ring of matter was given a centre of attraction of its own.

Let us ask the reader to remember that the original mass of substance was shaped as an orbit of a planet is shaped, and much broader at the centre than at the edges. Of course this would cause a ring obtained by a separation of the greater mass in the middle to be broader at the point or edge where the separation took place. An idea of this difference in the edges of this ring can be obtained by cutting a cone through from top to bottom. The bottom of the flat surface corresponding to the edge of the ring at the place of its separation from the sun, and the top to the outer edge. Now, in this form of this ring and in the consolidation of its substance at its central point, the cause is found for the existence, size, and locality of the great planet Jupiter in the plane of the planetary bodies. It is located at the very spot and is of exactly the size that the law of consolidation or construction of a planet from the matter of this ring would necessitate.

So plain is this fact that a small calculation of the means of its construction will establish its truth. Only a repetition of the work of separating the sun from this whirling ring could take place in the ring in order to give Jupiter an existence. The division of the ring would create three rings, and the middle one of course would be the greatest. A consolidation of the central portion of a ring gave the outer portions a greater velocity of motion, amd the result was a ring on each side. All of the planets are capable of demonstrating this fact, not only by their positions, but by their size. Now, do not forget to observe on the atlas of the planets the size and position of Jupiter, and the size and position of those on each side of it.

Nothing prevented the perfect copying of this work in the case of the other planets but the greater consolidation of the substance when the other planetary rings were divided. All that prevented old Jupiter having as many moons as Saturn was the greater capacity of the substance of its ring for condensation into a common body. All that gave our globe a beautiful moon was the incapacity of the condensing matter of the earth's ring to consolidate into one globe. The same cause furnished Mars with a couple, and the same cause constructed every moon in existence. The proximity of the planets Venus and Mercury to the sun was all that prevented these good objects having moons, and they do not need any. The same construction of light that affords the great sun its light is quite enough to give these closer planets a good condition of light at night. When we describe how every body of the system is warmed and lighted, it can be seen why a sun can be lighted and warmed also.

It is a fact that with each body a mere reciprocity of good influence is affected between it and the sun, and the work is as certain and necessary and consistent as the co-operation of the organs of any organization. All of the bodies of this greatest of systems are attached to the other parts of the system as completely and consistently as any organ of the animal body is to the other parts of it, and the whole organization affords a considerable amount of generation of animal and human creatures, in exactly the same way that the microscopic bacillus of the human and animal bodies are generated.

The creation of these smaller animals is but a repetition of the process that creates the infusoria of the solar organization. So distinct is the philosophy of the generation of all life with respect to its cause, that every creature is but a spotaneous generation of a bacillus in the decomposing substance of what was once a living organization of animal, plant or world. Can man expect to comprehend a Creator when he contemplates that he is but one of the infinitesimal bacillus of a great and unexplored universe in the keeping of such Creator?

Let us now advance one more step in the uncovering of the process of creation. We have now seen how a mighty world became an object of astonishment and importance in the great sky above us, and why it was second only to the sun. Of course when the old chap was allowed a separate existence in the form of a ring of the substance described, there was a ring on each side of this one, the only possible result of the creation of a central ring. All that gave existence to planets on the outside and inside of Jupiter was the division and moulding of a ring on each side of the one that was moulded into this enormous planet. Now in this fact, and the necessity of a division of one ring into three, the product of the process described, and the only possible result of its operation, there can be found all the evidence that a scientific or uneducated world will ever want that there are no other planets than those discovered, and that every object in the solar organization has been found, except a ring of meteors, or what should be called little planets between the earth and Mars, and the many rings of still smaller bodies of this character around the planets and moons. All that ever gave astronomers any idea of a ring of little globes between Mars and Jupiter, was the discovery of shining objects in that direction and the great space between the two planets. All that has prevented the astronomers from discovering that these so-called asteroids are a ring of countless mica shells between the earth and Mars was their inability to discover how all the solar system was created, and the handicap of theories that was drawn over their eyes by the authors who preceded them. "Newton proved" so many things that never existed that this class of teachers were crowded with the proof and could not contain anything else.

Around Saturn a sufficient example of the character and construction of the universe for astronomers to study has ever existed, but instead of the sign being read it has been covered all over by stupid and silly conjectures as to what it meant.

On the other side of Jupiter only three planets are discovered. What a confirmation of our claim that all are found! If the ring of substance on the outside of Jupiter had been divided into more than three rings, would there not have been more than three planets? Would we not be as able to see a smaller planet at this distance as we are able to see a large number of moons on the borders of these planets? But this is not all the evidence. The size of these bodies is equally strong proof that the ring of matter from which they were constructed became separated into only three rings, and the relation of the sizes of each of these worlds is a still stronger item of evidence, and the existence of so many moons is still further confirmation of the fact. In the size of each of these great bodies a chance is given the child of the earth to discover what that great ring on the outside of Jupiter was shaped like. The planet Saturn is vastly larger than the other two. Uranus is considerably larger than Neptune, and the increase of the sizes of the three outer planets is in the direction of old Jupiter. All that prevented the exact correspondence of these sizes with the breadth of the ring at such places as the planets exist, was the increased consolidation of their substance at the time they were moulded, and this fact can be definitely observed in the small departure from a completely gradual increase of their size from Neptune to Saturn.

Let all our readers contemplate this great truth, and when an astronomer is again unfurling his charts in a hall in your town, and displaying his utter ignorance of what he is teaching, will you remember that in the aspect of the heavens a complete refutation of nearly everything he is stating can be observed, and that it can be seen by a child when pointed to.

We intend that the child of the future shall see a constant finger pointing to all the facts of an astronomical nature, and it is certain that it will have one. When the character of the greatest organization that was ever constructed is understood, a child is capable of obtaining an idea of its character. Instead of its being what the astronomer is teaching, "the greatest problem of the works of Divinity," it is the simplest and least complicated of any natural organization that Divinity contemplated. Every one who obtains an understanding of its character will at once acknowledge this.

Now we are ready for another step in our task of description. On the inside of Jupiter a construction of several affairs has taken place. There are four planets, and three rings of mica globes, only, smaller than the planets.

In a division of the ring on this side of Jupiter a wonderful construction of curiosities is seen. Every planet is so small that they appear as pigmies in comparison with the great affairs farther away.

In this fact we can see not only that the substance of the great ring on the inner side of great Jupiter was less than the one on the outside, but that a ring divided into more than three rings will make more than three planets. What an unmistakable confirmation of the statement that only a great ring of substance was separated into three in preparing for the construction of the three great planets beyond the orbit of Jupiter, and that all planets and moons are the products of controlled and moulded rings of substance. On the inner side of the largest planet, our earth, Venus, Mercury, Mars and three rings of small bodies exist.

How did this occur? Nothing ever happened. Every one of these affairs was as systematically constructed as a watch. Much greater skill was employed. So small was this ring of substance we are considering, that our good but small world was the greatest thing that could be turned out of it. Only a repetition of the same process of division and moulding completed our globe and all the planets between Jupiter and the sun that gave existence to the other planets. On each side of the earth a ring was constructed as in the other cases of a division of a greater one.

On the side next to Jupiter a consolidation of this ring gave the system the little asteroids on each side of Mars, and the planet itself. On the other side of the earth the same character of work furnished Venus, its neighbor Mercury, and the ring of so-called meteors, that are so dreadfully puzzling the astronomers.

Only this ring of meteors, and the one of asteroids, have been observed by the scholars of astronomy, and all that has prevented them discovering the other was a want of knowledge as to the construction of either. Let us again insist that our readers remember what is given in the way of explanation thus far of a part of the solar system. It is all to be needed as a part of the description of the construction of the moons, and a perfect analogy of this work is to be seen in these smaller constructions. The

memory will not be burdened when a glimpse is obtained of the whole affair of this work of the Creator.

A problem is only puzzling until it is solved, and when solved the knowledge of its character is but one fact in the mind. A most curious capacity of our organizations is the power to store the mind with ideas. All the facts of creation can find lodgment in the mind, when they are correctly obtained. As fast as a great problem is unravelled, a fact of one simple stretch is seen. It becomes merely a simple and single fact. Only a reduction of fragments of a fact to a grand idea is made when we comprehend a problem of creation or of mathematics or of mechanics. As a yarn is only snarled when it is twisted into a multiplicity of knots, so is any other problem only a snarl of misunderstood facts. The unravelling of either is sure to present a simple and single object. The object of our work in reference to all the problems we are discussing is merely to disclose simple facts, where only fragments are now obtained.

One more step is now in order in the description of what was done in making a solar system.

On the firmament there is a curious exhibition of the work of creating the lights on the sides of the planets and moons presented to the sun. The planets Mercury and Venus present the same aspects of illumination that the moon does. Every globe in the system is claimed to be a ball of fire by the astronomers. What prevents a ball of fire from shining on one side as well as the other. If each of these small planets is a ball of fire, why is it necessary for the sun to shine on them to allow the fire to be seen, or the planets to shine, and why does a great ball of fire give any brighter light to a smaller one in a similar condition of heat?

Why do astronomers claim that the brilliancy of all the superior planets—those beyond the earth—is caused by the fact that each one is a great ball of fire, when they know that all that makes Venus and Mercury shine is the effect of the sun, and that this effect is only on the sides of the planets presented to the sun? Of course they find an excuse for this claim, and it is merely in the equally absurd idea that these inferior planets have obtained a cool dark crust. This claim presents as much difficulty as the other, for it is puzzling to understand why a sun ray, if there is one, can illumine a dark surface of earth and make it shine as a dazzling diamond.

The good old moon is placed in the same catalogue of dark bodies merely because it cannot shine unless a sun is making it shine. When it is found necessary to have a planet or moon in a cool condition, it is claimed that it is, where it is not necessary it is a ball of fire. All of the teachers of astronomy have obtained a variety of charts of the moon, and on these pictures of the body they have named all the objects with distinguishing appellations.

A mountain is given a glorious name, and so is a crater, and so is a plain. Some of these mountains are large enough to cover the State of Ohio, and higher than any mountain on earth. One crater is as large as half the United States, and a plain is discovered nearly as large as the continent of Asia. All of these objects are described with great care and confidence, and a great work of wonder and importance is supposed to be performed in giving an account of such great affairs on this globe.

In every instance of this display of the ignorance of astronomers, there is only a giving of a most ridiculous account of objects upon a sheen of electric illumination as simple as a candle light. It is to receive a careful explanation in the following chapter of this article, and a greater wonder than astronomers have ever discovered in this satellite of the earth will be found. It is proper in this connection to state that every object in the sky that can be seen is a creation of light on a side of a stellar body.

Let us advance another step in the work of explanation. Near the plane of the sun's equator—a line extending from every point of the sun's equator as far as the planets are existing—there are arranged the eight planets of the system, and they are nearly on this plane of the ecliptic. It is absolutely true that only a variance from the straight line exists, sufficient to allow a current of electricity of the sun to directly approach each planet. In all the affairs of creation no more convincing affair can be found that some calculator of intelligence was the contriver of this system.

Astronomers have noticed this variation, but have never given any explanation of the cause of it. They do not seem to consider it of any importance, but have in a few instances attributed the inclination of the poles of the planets to the crowding of the planets out of the original plane of the equator of the sun. In what can be disclosed concerning the creation of the light of each planet, and the fact that the light

of each is all that has ever been seen of it, the reader can see what astronomers know about the inclination of the axis of a planet. We will let the reader see what we think about it here. A planet is crowded to the right or left of the plane of the ecliptic by a current of electricity passing between the sun and a more distant planet. The mutual attraction of the two bodies is capable of forcing one side an intervening body, or altering the position of both. In this operation only a common crowding of an object to one side by a current of electricity is seen. In this work of an influence of the creation, we can find the cause of the inclination of the orbit of a planet to the ecliptic, for the degree of inclination will be the extent that a planet was crowded from the plane of its creation, which was the same as the ecliptic. The degrees of inclination as given by assronomers place the two planets nearest the sun the greatest distance from the ecliptic, and the planets Saturn and Mars next to these in distance. The planet Uranus is placed almost exactly on the ecliptic; Jupiter about one and a third degrees from it, Saturn about two and a half, and our earth one and a half to three. Neptune a little less than one and a half, Mercury seven, Venus three and one-third nearly, Mars not quite two. These calculations are not what the method of creation would indicate as to the position of these bodies, but it is not widely different.

Now the axis of every planet is inclined to a much greater extent than the orbit. This is the case in every instance so far as their inclination is known, and the inclination can only be ascertained by a view of the objects on what is seen, and their motions. What inclines an axis of a planet more than an orbit? If we are correct in our claim that every planet rolls on a material foundation, and that that foundation is shaped as the whirling body of condensing substance was shaped, it can be seen why the planet could be crowded only a small distance from its original plane, by a cant of the foundation, and at the same time be given a tip of its axis to a much greater extent. A mere rolling of the globe a small distance on a round apex.

Will the reader now observe the relative sizes of the bodies of the system, so far as described, and give us his opinion whether the process of creation we have described is the result of accident or calculation, or whether the description is merely a fancy of the imagination?

Commencing at the sun, a small planet is seen. Next to this a larger one; next to this one a mere ring of small bodies, all of them less in amount of substance than the planet. Next to to this ring a planet a little larger than the last. Next to this planet another ring of small bodies not containing as much matter as the planet. Next to this another planet, containing more substance than the ring of small bodies. Next to this planet another ring of little bodies, called asteroids, less in amount of substance than the planet. Next to this ring a great planet, then a smaller one. After this a still smaller one, and another yet smaller. Up to Jupiter a great and small creation alternately; precisely what must have resulted from the process of creation described. Beyond Jupiter a gradual decrease, corresponding to the shape of the ring from which they were constructed. Now, in another chapter, it is believed, we can finish our description of the offices of electricity in the solar system.

We shall need but a small amount of printing to comprehend all the description of this system. When it is in the hands of our readers it will be called for from one quarter of the globe to the other. All the credit we ask, when it is read, is that in the future numbers of the paper we may be able to print the denials of what is stated. We will agree to print them all, and allow them to be read without contradiction.

Chapter III.

We desire now to take another step in our description of the organization of worlds. The preceding chapter was closed by the description of the position of the planets with respect to the sun. We observed the fact that each planet was careering around the sun on a foundation. In this chapter the whole philosophy of the revolution shall be given, and the proof of what is stated. The world is only careering about the sun on an archway, and it is held down on the affair merely by an attraction of the great magnet in the centre of the system in the same way that we are held on the earth. In every step of our lives, a clamping of our feet on the earth is obtained by a separation of the atmospheric gases around the feet. When our earth is rolled over, a clamping of the same kind holds it down upon this gorgeous covering of the nearest object on the side of the earth toward the sun. In the moulding of the planets and moons, a copy of the work of the cook in moulding bread was

performed. The current of force that carried the nebulous ring around in its pointed orbit would huddle the substance into an oblong mass at the gorge of the current or point of the orbit, and the repeating of the work would soon produce a mass so spherical that it could be rolled over.

Who ever has seen a substance pass through a turn in a stream, has seen the character of work that moulded into bodies of oblong shape, the substance of every globe in the heavens. In every creation of such a body only a moulding of the plastic substance took place, and the form of every moon's orbit, and the perpetual rotation of every planet was originated in the whirl of a gorged mass of substance. It is in this performance of whirling nebula, the student of science is to discover the construction of the orbit and coursing of every moon, and the rotation of every planet on its axis. Every globe in the heavens and each of its motions is an item of evidence of this character of work. Let us be understood, and do not make any mistake in a conception of what was performed. Only a huddling of substance in the pointed end of an orbit of a globe, when the substance was so thin it could be easily shaped by the operation, gave a ring of substance a partly globular or elliptic form. Sawdust scattered in a winding stream, will at every gorge accumulate into a shape nearly round, and if it retained a condition of condensation, it would construct a globular mass of identically the same shape as an orbit of a moon or planet. The driving current will render such a mass broader at the upper or resisting end. A driving current of electricity will construct a broader end of a mass that is moved by it. How simple this arrangement for moulding a globe. Why could not La Place or Kant or the great preachers of old theories have understood so simple an affair? Solely because "Newton proved" that only a fiat of God gave existence to a planet, and that it was only prevented running off into infinite space by an attraction which this Being determined that man should never understand. This style of idolatry is all that is keeping the world in ignorance at this day, and although scientific preachers are pointing a finger of scorn to the ignorance and superstition of a church, they are at the same time worshiping equally egregious follies, and are as superstitious in their worship of a false teacher and proposition as any worshiper of an old teacher. In every effort to change their babel of admiration by a more independent mind, there is returned exactly the same kind of deceitful and malignant denunciation of the more rational thinker.

What a consternation among these babel builders there would be, if there could appear in the pulpits a preacher who could point out the idolatry of these scientific devotees of scientific superstition. A superstition is only a misconception of a fact, or an erroneous view of a work of nature.

Let us advance a long stride now in this work of delineation of the Creator's world-making.

When a mass of this condensing substance commenced to roll over in the current, a construction absolutely the same in form and direction of motion as the original mass of the substance of the whole system was created. What a glorious provision for commencing the development of a whole class of smaller systems in every sense the same in character as the general system. How much are mortals comprehending the way this work of grandeur, wisdom and beneficence was performed? It is as much beyond their capacity of appreciation, at present, as though it was not a reality. When this process of the operations of a law, and it was merely a law that was obeyed, is seen by the people, a whole class of souls can express an admiration of what the work of a great agent of creation performs, and give a small amount of credit to a hand that deciphers it.

When a clear understanding of the development of our whole world is obtained, a glorious conception of the development of all worlds is obtained, and it is to hasten this appreciation of the handiwork of the Creator that our work is performed.

Now we shall have explained everything that took place in the creation of the moons and the rings of small mica shells around them, when we have stated that in the masses of the substance that was moulded into egg shape bodies in these orbits of the planets exactly the same operation took place that occured in the original body of condensing matter. The process was only repeated in constructing planet and moon and ring of little stars.

Let all observe that in the huddled mass of substance that was constituting a planetary ring there was a body of the matter of the same shape as the whole body from which the whole solar system was created, and that it was converted into a central body (a planet) and rings in pre-

cisely the same way that the original great mass was converted into a sun and rings. The rings obtained from the conversion of these smaller masses were moulded into moons in precisely the same way that the greater or planetary rings were moulded into the oblong bodies we are describing, and finally into worlds. Every moon's orbit is shaped as the orbits of the planets are, and the moons obtained their existence by a congregation of the substance of their original rings in a point of their orbits.

Around Saturn there are the three rings that could not be moulded. There was not sufficient matter in them. All the confirmation of the propositions advanced concerning the divison of a ring into three, and that the central one was the largest, and that the moons were derived from the same character of rings as the planets were derived from, that a sensible person will care to see, is capable of being seen in the three rings around Saturn.

The eight moons and the rings together disclose exactly the same amount of division of a ring of substance around the planet that took place in the great ring around the sun.

Do not allow this fact to pass out of the mind, but observe its reality, and in the future it will afford a wonderful amount of satisfaction as a factor in the effort to understand the creation of the whole system.

We are now ready to take another step in our work of description. We have stated that in the orbits of the rings of substance that were controlled and converted by a moulding process into worlds, coverings of such rings actually existed, and controlled the operations.

Let us see if this is not true. Of course no moulding could have taken place unless a covering of some material existed on all sides of a ring. The only evidence of our proposition that is capable of being seen is the occasional appearance of the archway on which the planet Mars rolls around the sun, and the constant appearance of the archway on which our earth is rolled, called Zodiacal Light. As sure as a planet goes around the sun, and rolls on an axis, the planet is given a construction to roll on. No rotary motion of a planet would be possible unless a fulcrum was obtained by a thing on which it rests. This most startling fact is capable of the plainest possible demonstration, and it is to be found in the calculations to be given concerning the motions of all the planets and the absence of a rotary motion in their satellites.

On the surface of every ring from which a planet was constructed, a crust of the condensing substance was created, and it was an operation in all respects like the construction of the cornea of the eye, or the cell of a plant, or the formation of ice upon the surface of water.

On every part of the surface of a ring of condensing substance, a slight cornea was constructed by the process of condensation; only a small condensation of the surface of the ring. When a sight can be obtained of the Zodiacal Light, a view is obtained of a construction of this character. When a view of an object of this character extending across the sky is obtained, as there often is, sight of another such object is obtained. This object is supposed to be the greater extension of the Zodiacal Light. Every belt of dark shade on the planets Jupiter and Saturn is produced by the existence of the constructions of this character between us and these planets. The two additional belts on Saturn are due to the existence of one more such creation beyond the planet Jupiter. The degree of transparency of these archways is what prevents them creating utterly black belts upon the sky. When the proof is offered that every planet is capable of going around the sun only as a ball rolls on a floor, and that the actual period of revolution is just what this manner of rolling requires, it can be found that what is now stated is wholly true.

We ask that a chart of the planets Jupiter and Saturn be examined, and the character of their belts observed. It is desired that no part of the propositions of this article be observed without an examination of what is pointed to, and the whole of the facts connected with it.

When a glance is given the sky on a clear night a whole atlas of the bodies of the heavens that are above the horizon is capable of observation, and the objects discerned are of three kinds, planets, moon, and stars. When a sight of the objects are obtained through a telescope, the fact is disclosed that a planet is a greater body than the stars, and the moon is so near that a view of objects on it or on what is considered the moon is obtained that convinces us that it is swung around the world without any other motior than a mere revolution about the planet.

It is not given a rotary motion, and this fact is clearly demonstrated by the objects on the body always continuing in the same position.

If the orb was rotating on an axis, the objects would be seen to move in the direction of rotation. The incapacity of the moon to rotate is caused solely by the want of a floor on which to roll. The only reason why the moons of any planet can not roll on an axis is the want of a thing to roll on. It was the fact that a moon was simply carried around a planet by a current of the influence of the planet, and the work performed as though a hand was stretched out from the globe, and held the moon in it, that gave Newton the opportunity to discover that the hold upon the moon by the earth was just equal to the centrifugal force exerted by the moon in its revolutionary motion. Of course if the current of influence of the earth was the power that carried the moon around the earth, the force of attraction by the earth and the centrifugal force of the moon would be equal. In this exhibition of a globe being swung around another, without any rotary motion being imposed upon it, there is a complete demonstration of the fact that a planet is operated upon by some influence other than the current of electricity of the sun, in order to give it a rotary motion. Without a means by which one side of a planet can be moved more easily than the opposite side, a planet would be merely swung around the sun as a moon is swung around a planet. The system of a planet and moon or moons is precisely the same as the system of sun and planets with respect to the relation of the different bodies. In this contrast in the motions of the planets and moons, there is abundant reason for claiming that a construction of some character is furnishing a planet the means of a rotary motion.

This evidence of the fact that a planet is provided with a floor to roll on is not of a character to satisfy the mind that a planet does possess such a means for its rotation. The world desires better demonstration when the means of a phenomenon can not be observed.

It is competent to offer all the evidence of the existence of such a means of the work of rotation, and it is wholly within the reach of demonstration.

We have observed the fact that all the small planets (those between the sun and Jupiter) complete a rotation on their axes in about twenty-four hours, while the four monster planets beyond these are capable of rotating in less than half this time. The cause of this difference in the time occupied by the smaller bodies in a rotation on their axes has never been explained. A whole catalogue of conjectures as to the cause has been offered, and all of them thrown aside as soon as given. The only reason why an explanation of this difference in such motions was not given the world a century or more ago was the supposition that only a continuation of a motion, originally projected in the creation of such bodies, was being operated, and that no connection existed between the bodies of the system except the influence of attraction, and that all the spaces between the bodies were voids. This apprehension as to such affairs is still entertained, and it is considered idle to underatke the solution of the question of the origin of either the revolutionary or rotary motion of the worlds of the system.

Will our readers now give us their careful attention while perusing what will here be stated in explanation of this wonderful work?

Only a common force is exerted to perform both the motions of the planets. The velocity of each planet corresponds to the degree of velocity of this force, and the degree of velocity corresponds to the distance of the planet from the sun, the originator of the force. If the planets were all of one size, only a calculation of their distance from the sun would be necessary to discover the velocity of each. A difference in the size of the bodies would create a difference in velocity at the same distance. This is all that is necessary to state concerning the difference in the velocity of the planets in their revolutionary course.

To ascertain whether a planet can pass around the sun in the period it is known to go around by simply rolling on its surface, the circumference of the orbit must be obtained, and also the circumference of the planet and the circumference of the orbit divided by that of the planet. If it be found by such calculation the planet in the number of rotations that it is known to make in a revolution will just describe the orbit, it is demonstrated that it actually rolls around the central body, and describes no space that its surface does not measure. Now this is the fact with respect to every planet in the system. The only difference in the operations of this character of the planets is derived from the fact that all the small planets are given an encasement that includes the moon or moons and all the small creations obtained by the construction of the planet. The four larger planets are actually rolled on their

surfaces around their orbits as a ball is rolled on a floor. The operation of their revolutions is only such a rolling.

The four small planets are each given an encasement that rolls around the sun in precisely the same way. In our calculations of the deciphering of this work only a mere calculation by common arithmetic was employed, and it was all that was necessary.

When Copernicus solved the problem of the general features of the solar organization this work was left undone. When Newton observed the power of attraction to be universal, this work was left undone. It is still undone, and will only be done when this article comes into the hands of its readers. Every person who reads it can see that what is stated is true, and that this part of our work is proven by the unyielding principles of mathematics. The only thing necessary for any one to do to show others that a great planet is actually rolled around the sun, is to divide the circumference of the planet's orbit by the circumference of the planet, and ascertain by the division of the quotient by the number of hours in one of our days, and multiply this quotient by the number of hours it is known the planet occupies in one rotation. If the number of years in a revolution must be known, the number of rotations can be multiplied by the hours of one rotation, and dividing the product by the number of hours in one of our days, and with the four greater planets the amount multiplied by the number of days in a year. This process will disclose the fact that each of the great planets do roll as we have claimed. The circumference of an orbit is obtained by a calculation upon the mean distance a planet is from the sun. Any child having knowledge of the principles of mathematics can perform the calculation. So very close will the result compare to the known periods of revolution of these planets, that an astronomer is at once able to detect the errors in his calculation of the distance of the planets from the sun. The periods of rotation of Uranus and Neptune are not obtained by astronomers. All the means ever employed for ascertaining the period of rotation of a planet was the observation of the appearance and disappearance of spots on the disc of the planet's illumination. No spots can be discerned on the aspects of these two outer planets, and therefore their periods of rotation are not known. It can be seen from what is stated that all that it is necessary to do to ascertain the periods of rotation of these bodies is to divide the hours period of revolution by the number of rotations, or to divide the circumference of the planet by the distance it moves in an hour. The number of rotations are found by dividing the circumference of the orbits by the circumference of the planets. Below a table of the periods of revolution and number of rotations, and the number of years in a revolution are given, not only as to the greater planets but as to the smaller ones. In obtaining these data the table of distances and periods of revolution and rotation provided by Loomis in his "Treatise on Astronomy" was used. The bare facts of the distances of the planets from the sun, and the period of revolution and rotation as far as known were all that were accepted of his work. His tables are more correct than any we have examined. Our calculations demonstrate this.

By this table we print a conclusion is forced upon the mind of all unprejudiced persons who see it, that the work is correct, and that the disclosure of the way a planet is whirled around the sun is made. The only opposition it will encounter will be from the teachers of astronomy, whose science is merely what others have given them. No other class of persons will deny it, and all denials will be but a short opposition to the establishmant of the facts. We are entirely unconcerned as to the way we are to be treated for our work, and it is of no consequence whether we are credited with the disclosure or only denied it. The work we are engaged in is not to create a reputation or to make a fortune. Only a desire to enable the community to understand the affairs of creation as we conceive them to exist gave us a disposition to publish our conclusions. We are confident that another generation will come into possession of a vast amount of information of importance concerning the works of the Almighty, and if our effort is found to contribute to the information obtained, we shall be compensated for all that is done.

In case of the smaller planets, there is a way to ascertain what the size is of each affair that encloses one of them, and which carries the planet and all that concerns the small system of globes arouud the sun. As these coverings can not be seen, the size of each must be obtained by a calculation of the period of revolution and the distance a planet passes over its orbit in an hour or day. The period of revolution is known, and the distance a planet passes over its orbit in

hour is nearly correctly given. The distance of the motion of a planet in an hour multiplied by the number of hours in a rotation will give the circumference of the planet's encasement. The division of the circumference of the planet's orbit by the number of hours in a revolution, is another way to determine the circumference of a body that is performing the revolution.

The two periods thus obtained will be exactly the same, unless there be an error in the distance of the sun given by the astronomers. Our calculation was originally made on the assumption that the orbit was traversed by a body that extended around the moon at a distance of five thousand miles beyond the point of the mean distance of the moon from the earth, and it was discovered to be the exact size of the body, within a small fraction.

In calculating the size of the affairs that enclosed the three other planets, Mars, Venus, and Mercury, it was found that the sizes of the encasements of the four planets increase from Mars to Mercury in the same proportion that the velocity of the revolutions of these planets increase, allowing a difference for their size. In the existence and size of the encasements of these small planets near the sun, there is disclosed a provision for the protection of the planets against the destructive influence of the great and swift current of the subtle influence that moves them. It is a fact that every one of these bodies would be burned up in the current of electricity that carries them around if they were not protected by a shell of the character described. A bare observation of the effects of the influence upon all bodies where it strikes them with a great velocity of motion, and the velocity of a current that will move one of these bodies from fifty-five to one hundred and ten thousand miles per hour, is all one needs, to satisfy him that each of the small planets with all their attending bodies would be destroyed in a few moments if they were not thus protected. Let this fact be considered, and it will be found to be additional proof that all these planets are given a covering of the character described. Let, also, the fact of the different velocity of planetary revolutions be noticed.

All that gave these bodies a covering of this character was a condensation of a small amount of the surface of the mass that was converted into these planets and moons. An operation in motion can decompose any substance, but it will not produce a sensation of heat where there is no moisture in the atmosphere or in the sub-

Now what can possibly prevent the earth or any one of the small planets from being attracted to the side of this encasement next to the sun, and on to the foundation on which the encasement rolls? In other words, why does the planet continue in the focus of this shell?

The answer to this most important inquiry will disclose the reason why the greater planets are attracted to the partition on which they roll, and caused to roll on their surfaces.

The work of the planets that are given a chance to roll around in the centre of the affair that encloses them, is all that is preventing them from being pulled down on to the archway of the revolution of the encasement. Only a rapid revolution of the encasement of these planets is necessary to lift the planets into the centre of the encasement and cause it to revolve on its axis as the controlling body rotates This is actually the case, and it is only possible in the case of a small planet. If the planet was as large as either of the four greatest planets, it could not be done, and the planet would, by reason of the great amount of attraction of the sun upon it, be brought down on to the object that gives it a way around the sun. All of the greater planets are caused to roll on their surfaces on account of their size. On our earth the creations are undisturbed, and can continue an existence. On the great utmost planets a chance to exist is on the sides of the planets opposite the equator.

The only cause of the great inequality in the conjunctions of Jupiter and Saturn, which are so puzzling to astronomers, is the egg-like form of their orbits. When a competent understanding of the shape of an orbit is obtained, every phenomonon of motion not produced by the attraction of the different bodies can be explained, and it will be.

This is all we care to state concerning the creation and character of an organization of what is in fact the universe. All that is necessary to do in addition to what is given the reader is to explain the character of a comet and the philosophy for heating and lighting the bodies of the system.

A comet is only an attempt to create another planet in the current of electricity that sweeps between two existing planets, or between the planet Mercury and the sun. The mere partial consolidation of a portion of this current at a produce heat in the atmosphere, [illegible] globe of fire, can not extend any heat beyond the vapor of its organization, and if it was al-

derived, is what is constructing a comet at some point of the system every day of the existence of the system. All that prevents a construction of a ring from the current between each planet of the same character that was constructed in the creation of the system is the capacity of the current to burn up and convert into electricity again all the partially condensed current. As soon as a part of the current is consolidated sufficiently to offer a resistance to the sweep of the current, it is at once destroyed by

every comet that appears, and by a hundred scientific authors in different parts of the world.

No apprehension of trouble to the world or to

ob- num- ber of divid- r of time. ivide our ult.	Actual period of revolution.
	87,969 days.
	224,701 days.
	365,256 days.
	686,980 days.
	12 years.
	29 years.
	84 years.
	164 years.

proof of the accuracy

derived, is what is constructing a comet at some point of the system every day of the existence of the system. All that prevents a construction of a ring from the current between each planet of the same character that was constructed in the creation of the system is the capacity of the current to burn up and convert into electricity again all the partially condensed current. As soon as a part of the current is consolidated sufficiently to offer a resistance to the sweep of the current, it is at once destroyed by the current that is moving. Every comet that will exist, will illustrate this fact by its aspect, and all that have existed gave the illustration to no purpose. A pushing of an ignited substance in the direction of the motion of the current is all that takes place, and the appearance of a comet is what this operation will produce.

No comet can pass quite around the system, and none ever has gone around it. The reason for this is that the comet is burned up before it can perform a circuit of the sun. A comet will disappear in the outer portions of the system much slower than at the points close to the sun. This difference is produced by the greater velocity of the current at the point near the sun. A careful observation of the destruction of one of these objects will disclose the fact that the rapidity of the consumption of the object will correspond wholly to the velocity of the influence of the sun at the point where it exists. A comet is greater at the outer portions of the system, and this fact must be taken into consideration.

The periodicity of comets is only a consequence of the fact that condensations of the current between any two planets, will be as constant and uniform as any operation in nature. Of course a comet will appear at regular intervals at the same place if the condensation is uniform and constant.

Let this analysis of a wonderful and unsolved problem be given a careful observation. In the future our readers will see it confirmed by every comet that appears, and by a hundred scientific authors in different parts of the world. No apprehension of trouble to the world or to any body in the sky by a comet need be felt, for they are utterly without power to injure anything, if they could strike it, and they have as

LOOMIS'S TABLES.

	Mean distance from sun. Miles.	Diameter in miles.	Siderial revolution. No. of days.	Distance passed over the orbit in one hour. Miles.	Period of rotation. H. M. S.	Period of revolution. Mos. and y'r's.
Mercury	37,000,000	3,000	87,969	109,795	24 5 28	3 months.
Venus	69,000,000	7,700	224,701	80,320	23 21 21	$7\frac{1}{2}$ months.
Earth.....	95,000,000	7,926	365,256	68,311	23 56 04	1 year.
Mars.....	145,000,000	4,500	686,980	55,341	24 37 22	2 years.
Jupiter.....	496,000,000	92,000	4,332,585	29,948	9 55 26	12 years.
Saturn	909,000,000	75,000	10,759,220	22,118	10 29 17	29 years.
Uranus.....	1,828,000,000	36,000	30,688,821	15,597		84 years.
Neptune	2,862,000,000	35,000	60,126,722	12,464		164 years.

OUR TABLE OF CALCULATIONS.

	Diameter of planet. Miles.	Circumference. Miles.	Distance of orbit passed over by planet in one hour. Miles.	Period of ro'n. of the planet, obtained by a division of the circum'e. by the No. miles per h'r. H. M. S.
Uranus.....	36,000	113,142	15,597	7 15 $18\frac{2918}{5199}$
Neptune	35,000	110,000	12,464	8 41 $31\frac{391}{779}$

	Circumference of Orbit.	Circumference of Planet.	Circumference of encasements, obtained by calculating portion of orbit passed over by planet in one day.	Number of rotations in one revolution, obtained by dividing circumference of planet or its encasements.	Actual number of days in one revolution.	Number of h'rs, etc., in one rotation, calculated upon number of rotations.	Actual period of rotation. Hours, etc.	Distance in orbit passed over by planet in one hour.	Distance in orbit passed over by planet in one rotation.	Period of revolution, obtained by multiplying number of rotations by number of hours of rotation, and dividing product by number of hours in one day of our time. For superior planets, divide by number of hours in our year. Have years as a result.	Actual period of revolution.
Mercury	232,571,428		2,644,229	87,954	87,969	24H. 4M.—S.	24H. 5M. 28S.	109,795	2,644,229	87,969 days.	87,969 days.
Venus.....	433,714,285		1,875,940	231 +	224 +	23 21 21	23 21 21	80,320	1,875,940	224,701 days.	224,701 days.
Earth.....	597,142,857		1,633,243	365 +	365 +	23 56 +	23 56 +	68,311	1,633,243	365,256 days.	365,256 days.
Mars.....	911,428,571		1,362,640	668 +	686 +	24 37 22	24 37 22	55,341	1,362,640	686,980 days.	686,980 days.
Jupiter.....	3,117,714,285	289,142 6-7		10,782 +	4,332,585	9 55 26	9 55 26	29,948	289,142 6-7	12 years.	12 years.
Saturn.....	5,713,714,285	235,714 2-7		24,240 +	10,759,220	10 29 17	10 29 17	22,118	235,714 2-7	29 years.	29 years.
Uranus.....	11,490,285,714	113,142		101,556,315	30,686,821	7 15 $18\frac{2918}{5199}$	7 15 $18\frac{2918}{5199}$	15,597	113,142	84 years.	84 years.
Neptune	17,989,714,285	110,000		163,542,857	60,126,722	8 49 $31\frac{391}{779}$	8 49 $31\frac{391}{779}$	12,464	110,000	164 years.	164 years.

NOTE.—See the correspondence of the hourly motions of planets to the circumferences of planets and encasements, and also to the mean distances of planets from the sun in Loomis's table. The proof of the accuracy of the periods of rotation obtained of Uranus and Neptune is found by the employment of these amounts to get their periods of revolution.

little chance to come in contact with any other body.

The current that burns them up is holding them as completely in its power, as the current of the earth holds the moon. A comet can not pass out of the control of this current.

Any explanation we can offer of the cause of light and heat will be so utterly opposed to the accepted theories of the cause of these phenomena that only a demonstration of the truth of our propositions, or the discovery of the cause by the accepted teachers of science will be accepted as a proof of its truth. Since our publication of the cause of these affairs in this paper, a considerable advance in the knowledge of their source is made in scientific circles. A great discovery is made in England that a current of electricity in a state of vibration will produce a light. The fact is given endorsement by a portion of the scientists, and a partial conception of the offices of this agent in the production of heat is obtained. We have published our observation of this fact for a year. The only thing apparently needed to satisfy all inquirers that only a vibration of this influence is producing all the phenomena of light, heat and sound, is a conception that the influence is a fluid, and that it is the one general fluid of the universe. It is only to be observed that all the affairs of this character are but a result of a commotion in the current of this influence in the atmosphere, in order to give a farewell departure to all the pesent theories concerning their cause. We can do no more than to afford the world a chance to discover this great truth, by a perusal of this work and what has already been published. The world is soon to find the endorsement from every scientist in existence.

Now to produce a vibration of the current of electricity a concussion of two or more currents must occur. This is all that is ever done to create a light. When the vibration is sufficient to vibrate the atmosphere, sound is produced; when it is sufficient to vibrate the water in the atmosphere heat is created. We want the readers of our work to clearly observe this philosophy, and remember it. No substance less solid than water or vapor of the atmosphere can by any motion of its parts create what is termed heat. All less condensed substances will fail to produce the sensation. A current of electricity in motion can decompose any substance, but it will not produce a sensation of heat where there is no moisture in the atmosphere or in the substance destroyed. In any vessel where the air (and of course its moisture) is exhausted wholly, a concussion of electrical currents can take place and produce the brightest possible light without any creation of heat. This fact can be witnessed in the nearly airless globes of the incandescent electric lights now in use. It is the impossibility of exhausting the globe of all its atmosphere that is preventing a perfectly heatless light being constructed within the globe. Let us ask that this philosophy be considered particularly, in connection with what is to be stated concerning the creation of heat around a globe of the solar system. Every one knows that if an ascension is made to a great elevation above the surface of the globe a colder stratum of atmosphere is reached, and that the cold increases as the ascension is increased. This is a perfectly satisfactory demonstration that the heat of a globe is connected with the vapor in its atmosphere, and that the heat decreases as the vapor is decreased, and that beyond the vapor there is no heat. Only for a small extent around the surface of a globe is there any heat.

Let us ask, if this is true, why a world of so-called scientists can believe that a ball of fire can cause the heat of another body many millions of miles off, and why they can believe that one body is capable of warming another so far away by a vibration of only a vapor on its own surface, or by a vibration of anything on it. It is believed, and a most stupid and blind conception of all the cause of the heat and light of the different bodies in the solar system is obtained by every one of this class of scholars. A bare assumption that a great world of fire only is extending its heat to the limits of the solar system is all that constitutes the work of the scientists concerning the means of heating the planets, and it is all that they can offer. It is also a mere assumption that the same great ball of fire is giving light to the whole system. A want of comprehension of the fact that a ball of fire as large as the sun can not extend any heat even a million miles in space, and that a condition of fire of such a kind cannot give any such character of light or extension of light as we behold, is all that prevents this most stupid old theory from being abandoned by all persons. It can be at once seen that if a vibration of vapor is necessary to produce heat in the atmosphere, the sun, if a globe of fire, can not extend any heat beyond the vapor of its organization, and if it was al-

ways a globe of only fire, it could never have acquired either an atmosphere or vapor. Oxygen is not created by a fire. Water can not be created without oxygen. What could have created either from a ball of ignited matter?

Besides this objection there is no vapor in the spaces between the bodies of the system. This of course would prevent any continuation of the heat of the sun to other bodies. Better still is the objection, that no world or body of the system is made of fiery substance, and a sun is only a greater world than the planets.

Every particle of the old theory that the worlds of the system were originally bodies of ignited substance is a folly merely, and it is absolutely a disgrace that the folly is still accepted by the people. It is a proposition only proper for a savage to accept, and an ignorance of the character of the worlds of the system quite as great as the savage possesses is the cause of its acceptance in civilized societies.

The creation of both heat and light for the bodies of the system, is the concussion of the current of the sun's electricity with a current of the smaller body; a most competent and simple provision for bestowing these conditions of the atmosphere upon the objects of a great and all-perfect organization. No waste of heat or light is permitted. In all cases the creation of these affairs is adequate for the purposes intended. In no case is it more than adequate. What a satisfactory conception of this problem! What a solution of the means of the Creator for accomplishing a purpose!

No work of creation is more simple and none more competent. The beautiful exhibition of this transcendent plan of giving each body a warm atmosphere and a plenty of light the heavens presents, is a greater admonition of the wisdom of creation, than is observed by the existence of any single operation in nature. It is indeed no more wonderful, but its extent of display is far greater.

In the coming of a wider understanding of what is constituting a universe, there will be opportunity for mortals to behold all this work with a delight beyond power to describe, and it will harbinger the impression upon every soul, that in the keeping of a wise and good Creator, a world is existing, and that in all his works, a person of understanding and possessing the same qualities of intelligence that man possesses is actually superintending, and contemplating the whole arcana of nature.

In a day to come this conception of the Almighty will be obtained. The world has yet to discover that on every arch of the grand blue dome of the heavens there is a construction of glory as delightful as mortals can wish to see. The canopy of the sky is only a vast arena of provisions for giving man an existence of satisfaction, and providing him with a place of final and everlasting habitation.

HOW TO FORETELL WEATHER.

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It will be admitted that if the weather can be sufficiently foretold to enable people to get their work arranged or performed in a manner to avoid the bad effects of storms and changes of temperature, and to enable them to govern their acts so as to provide for the greatest amount of pleasure and comfort, there will be a great advantage obtained by the possession of the knowledge that will enable them to do this.

If the reader of this article will remember what it contains, he will possess this knowledge.

We have in several articles in the PROBLEMS OF NATURE given an outline of the philosophy that is operated to produce changes in seasons and weather.

The complete description of the causes of such changes has not yet been published.

The whole of it shall be given in the present article if our conclusions in reference to such affairs are correct.

The changes of temperature and the production of a fall of vapor in the form of rain, hail or snow constitute all the changes that can take place in what is called weather.

If it is possible to discover what causes a change of temperature or atmosphere we can, of course, observe what causes a descent of vapor. At any rate it will be observed that a decrease in the state of temperature produces a condensation of vapor, and when so condensed it will fall.

The precipitation of water in a thunder storm is a consequence of a concussion in the atmosphere of two electric currents. The concussion operates to create a sudden motion of the atmosphere in every direction from the point of concussion. This quick motion of the atmosphere in one direction overcomes the vibratory motion that constitutes the heat of the atmosphere, and produces an evaporation of water.

It is only when there is a great quantity of water in the atmosphere that a thunder storm is possible. A very good conception of the probability of a storm of this character can be obtained by observing the amount of drought in the country around the observer. If it is considerable and the evaporation continues for a short period a thunder storm over such part of the country is sure to occur, at least over a portion of it. The approach of such a storm can be ascertained in advance of its creation by an observation of the condition of the atmosphere. The atmosphere will constitute an unerring index of what is to take place in a few hours. When there is sufficient vapor in the atmosphere to arrest an outflow of the electricity of the earth, the presence of the electricity in the stratum of atmosphere on the earth is sure to be detected by a persons feelings, and by a clearer condition of the air.

In such a condition of the air a person feels strong and buoyant, and he will observe every object around him more clearly. A bluish hue will seem to panoply all nature, and the sound of any operation can be distinctly heard, and much further than at other times. This condition of the atmosphere is often observed in cold seasons, and it is sure to be the case in such seasons that the sky is overcast with clouds. It then appears as though all the impurities of the atmosphere have ascended and united with the clouds.

The reason why the sky is not overcast in warm seasons when the atmosphere is in such a condition, is because the vapor is so extended upward as to appear only as a smoke or slight haze.

Every thunder storm is begun by a clash of the currents of electricity in the upper part of this extended vapor, and the conflict continues until a cloud is produced, if the wind does not waft the vapor to another point of the sky. This is frequently done, and in these abortive attempts to produce a thunder storm there is observed what is called heat lightning. Every thunder storm will disclose this effect of wind more or less, and it often occurs that a whole cavalcade of thunder clouds in which lightning is playing its forked performance, will be deprived of its

fanciful lightning by the clouds being hurried off to another locality. Many an expected relief from drought has been blasted by a blast from the west or north.

The wind is caused by a current of electricity advancing in front of the cloud and coming on to the earth and uniting with the outflow of the earth's current and ascending again. This motion of the current describes only a common circuit of the influence. Every little whirlwind that stirs up the dust and catches the rubbish on the ground and whirls it over in the air, is produced by this whirling circuit of electricity that arises from the earth, and which, as it comes in contact with the cloud, turns its course and descends again and continues this career as long as a cloud is capable of halting its ascent.

This rolling circuit of the current pulls the cloud after it, and it is the motor that causes a thunder storm to operate over a great extent of country.

Every person who has noticed the approach of a thunder storm will at once remember that the storm is preluded by this whirling motor. It is as necessary a species of motor as the horse in the thills of the carriage.

Now when this whirligig is very violent a rain is sure to follow immediately, and if it is only a moderate sort of motor, a very little rain, if any, will occur. If this gymnasium of the current is up in the atmosphere a considerable distance there will be no rain.

All expectations of a rain will be as effectually blasted as this whirligig will blast the clouds.

It will be sure to blast them in a short time.

This is all that can or need be stated in reference to a thunder storm. The counteracting current of electricity that co-operates to produce a clash in the clouds is simply one discharged towards the earth by the sun.

The entire philosophy of the co-operation of the stellar bodies can be found in our articles on the offices of electricity in the earth and solar system.

Let us now see if we cannot ascertain what causes a change in the temperature of the atmosphere which produces rain and hail and snow.

In the fulling and waning of the moon, and the changes in its orbit, are to be found all the causes of the changes in weather and seasons, except the operation of the thunder storm.

In every fulling of the moon, there is simply a kindling of a fire on the side of the moon presented to the earth.

This construction of a great magnetic or electric light is the sole cause of all the changes in the temperature of the atmosphere whether accompanied by storms or without any fall of water, and in the shifting of the moon and its orbit every six months, all the causes of what are called changes of seasons are observed.

Now, the construction of this electric light on the side of the moon facing the earth, is only a conflict of the electric current of the moon with a current discharged from the sun, and it is always the same in extent on the side of the moon facing the sun.

It is allowed to be observed by the people of the earth, and to warm our atmosphere more than it is warmed by the sun merely by the moon being carried around the earth. In its course around our planet the whole outer surface of this great blaze of electric light is presented to our eyes, and it is by this coming around to be wholly presented to the earth enabled to augment the heat of the earth's atmosphere.

It never fails to assist in this work, and it is only necessary for people to watch its appearance and effects to see that this is true.

In each period of the fulling of this light there is sure to be as gradual an increase in the heat of the atmosphere.

Just before it is full the atmosphere will be the warmest, except in the coldest months, and then it will be the warmest just after the completion of the fulling process.

The reason why it is warmest just before the full of this additional skylight in the spring, summer and fall, is because we are so far north of the equator, that when the temperature of the atmosphere is increased by this operation between us and the equator, a wind is produced from the north that is colder than the atmosphere about us.

In this creation of a wind all the cause of the rain in these seasons, except that of the thunder storm, is found. A mere philosophy for causing the condensation of vapor in the atmosphere.

Every storm in the warmer seasons of the year, except the thunder storm, is produced by the current of wind, that is created by the additional heat caused by the moon, and

these storms are always without lightning unless the mass of vapor is so great that it will check the outflow of the earth's magnetic current. When this is the case, at any time of the year, a clap of thunder is sure to be heard.

Let the reader remember that by the greater heat of the atmosphere produced by the moon a current of cold air from the north is created.

The current is only coming to fill the space that is vacated by the more heated air which ascends, and a current identically like the one that furnishes the motor for the thunder cloud, except in extent, is furnishing the cloud of the condensing vapor of this cause a motor for coursing over an extent of country.

Identically the same means is constructed for pulling a great watering pot over the land in all places where water is wanted, as that constructed for pulling a similar pot of water over a smaller area as is seen in a thunder storm.

This whirligig current created by the moon will deceive people in reference to the fall of rain in the same way that the whirligig created by the thunder cloud does, for in its gymnastics a mere copy of the others' performances is witnessed.

The wind, if strong when the clouds are approaching, will be sure to be followed by a copious fall of rain at once, or within a few hours after. If the wind is light, very little, if any rain will fall. If the wind is in the sky, and causing the clouds to move rapidly no fall of rain will occur.

In every instance this will be sure to be witnessed.

Now, all that give us a change of seasons is the greater elevation of the moon in the winter season.

It cannot bestow so much heat upon us, but every change of weather, corresponding to the change of seasons, will be produced in the winter as well as summer.

The cause of the difference in the position of the moon is unnecessary to be discussed here. It is sufficient to state that in winter it is more elevated and farther from the surface of the earth.

In this position of the moon the atmosphere is less heated by it, and this difference of the heat is all that causes the season of cold called winter. The difference in the position of what is called the sun is wholly due to the different amount of heat the moon is capable of giving us in the winter. The so-called sun is an electric light also and it will oscillate over the earth from north to south according to the effects of the moon in assisting to open the earths' surface by its additional heat. This additional heat thaws away snow and ice and opens the ground to such an extent as to allow the magnetic current of the earth to be discharged and this outflow of the current is the counteracting influence that conflicts with the current of the sun and produces the electric light called the sun.

The reader can see that this changing of the outflow of the earths' magnetic current will create an oscillation of this electric light. As fast as the earth is opened at the north it is closed at the south, and as fast as it is closed at the north it is opened at the south.

The shifting of the moons route around the earth is all that gives the earth a chance to produce the growth of plants in the zones where ice and snow is on the ground for six months.

Now in this change of seasons another gymnasium of wind is created, and it is exactly like the two we have already described and produces snow and rain and hail in the same way that the cool winds of summer produce the descent of rain and hail.

The wind, if strong, is sure to be followed by a fall of snow or hail, and if not very strong only a small amount of these conditions of water will fall, and if the wind is far above our heads, and is making what the sailors call "cats-tails" in the sky, there will be no snow or rain, except perhaps a few flakes.

The current of wind is in this season sweeping over the entire temperate zone that is closed by snow and ice and its circuit is so extensive that it is always a cold wind. The current is getting cold as it approaches the north pole and it cannot be kept warm after being warmed at the more heated part of the earth until it reaches us again.

In the fact that a circuit of wind is always created when the wind blows, can be found the explanation of the opposite current of atmosphere that is always found by the aeronaut if he ascends very high while a wind is blowing.

No wind can be created except by the in-

fluence of a natural circuit of electricity, which is moving as the atmosphere moves.

What wonders the world are to discover in reference to the powers of electricity? The whole world has yet to understand that this agent is all that can create motion in any thing or creature, and that it is always done by coursing in a circuit.

This is all that we desire to state in explanation of the cause of storms and seasons. It is all that the people of the earth will ever require.

It is only necessary to point to the indications of the coming of a storm other than the thunderstorm the indications of the approach of which has already been described.

If a cloud is observed in the sky quietly reposing on a stratum of atmosphere no rain can occur for at least twelve hours and probably not for twenty-four hours.

If the cloud is dark and moves rapidly across the sky it will not rain for several days. If the clouds are extended in fleeces over the sky it will rain within a couple of hours after they quite cover the dome above us. When this so-called mackeral sky is seen, the good storm is gathered over the observers' head.

If the weather is very warm and a drought is existing a rain can be confidently relied on, if there is a cloud in the morning. If there is none a patient waiting must be inaugurated until it does appear.

All signs except this will fail, and a cloud at the eastern horizon in the morning will be always a harbinger of the coming of the watering pot. The reason for this is that a cold wind from the northeast is condensing vapor, after the sun has ceased to heat the atmosphere and is going down, this condensation will recommence and be able to produce rain.

There is no other index of the change of weather, except the change of the faces and position of the moon.

Every change of these affairs is followed by storms. A change of full moon to a partial blaze is followed by a storm, and a change from partial full to last quarter will produce another. Every sweep of the moon around the globe will produce two storms on every part of the globe except where a limited wind prevents it, and in summer there will be thunderstorms besides. There will be found to be twelve storms in the six colder months and no more. Only a greater degree of heat can cause any more.

Now let all who read this article watch the weather and the moon and detect, if they can, a single error in what is stated.

Loan this pamphlet when it is read, and let it do all the good it can do.

THE EVIDENCES OF CHARACTER.

HOW TO ACQUIRE PEACE AND MONEY.

PUBLISHED BY "PROBLEMS OF NATURE," N. Y.

In informing our readers of the means of ascertaining the character of a person, we do not intend to enable them to acquire any improper advantage of their fellow mortals.

It is possible to so understand the organization of a person, that a consistent and pleasant experience can be had with him or her. It is also possible to understand the wants of a person by the information their appearance and acts will afford.

We will give a most useful catalogue of facts of the organization and conduct of a person, which will enable any one who understands them to make friends of all persons they meet, and acquire their patronage and good offices.

Every person is disclosing his or her character and mind by the features, and by a constant exhibition of the same habits.

All of the features are intended not only to give the person a good appearance, but to acquaint others as to his character.

A reading of one's character is always performed, more or less, when a person is first seen. If a complete understanding of such person's organization could be obtained, a world of misery and trouble would be avoided.

Now when this article is seen we want the reader to commence a careful observation of all his neighbors, and ascertain what is the best course for him to pursue with respect to them. If it is not done a whole volume of valuable information is wasted. If it is done, and found to be practical, he must acquaint all his neighbors with the philosophy of getting acquainted with his good work.

In every person's eyes a glimpse of a part of the character of the person can be obtained, and to the extent the eyes reveal the disposition the information will be reliable. The mouth will disclose a part of the organization, too, and with equal accuracy.

The ears are also capable of disclosing something of the organization. The nose also, and the hair. The whole contour of the face and the shape of the brain are as capable of performing a disclosure of character.

We can obtain a good idea of a person's character by his conduct as well, and if it will not be disrespectful, we will add that the character and qualities of a woman can be determined by her acts.

Let us examine these different means of discovering what a person is, and when we are through with the examination we desire that all who appreciate it will give it to their neighbors to read, in order that, while the giver is observing the eyes and hair of his neighbor, the neighbor may be examining these organs of the giver.

Now a person's eyes are sure to disclose the honesty or dishonesty of the owner, and also the amount of his conversational powers.

These attributes of the capacities of a person are all the eyes can reveal. A great or little soul will be seen through them, and a moderate one also.

If the eyes are black the person will require a great deal of moral influence about him, to prevent his becoming a knave. A black eye is always sparkling with the associations of cunning and treachery. A most cowardly and unworthy man is as sure to possess black eyes as a crow is to possess black feathers. No person whose eyes are black can be given credit, unless he be one whose means are greater than his integrity. The eyes are often called black when they are merely dark blue or dark brown. We mean eyes that are actually black.

When a person's eyes are merely dark blue or dark brown the brain is simply studying the means of getting a living.

Such persons are as honest as the times will permit and no more so.

No means is given them for obtaining an existence except what is observed around them.

Such persons are but animals in human form

and are only continuing the habits of the animal that gave them their origin. They have no desire for anything but what will satisfy a propensity for obtaining money or a pride for appearance. Each of these attributes can be seen in the dog, hen, fox, peacock, and horse, and in many other brutes. There is no difference between the human brute and the animal, except in the degree of capacity and in form.

A quarrel between two human specimens is as apt to take place as between two of the lower order. The destruction of life by these higher orders is quite as likely as between any of the animals mentioned, and probably more so.

A considerable degree of difference exists between a person who is unable to disregard the wants of others, and one who is only taking advantage of another's wants to increase his wealth. There is in every community a great number of each kind. The one is a good citizen, the other is a bad one.

A person whose eyes are light and capable of giving any other person a calm stare, can be trusted although he has no property. He will not ask credit for more than he can pay. He is always anxious to give more credit than his interests will permit, and if he fails to meet an engagement it will because others are failing to meet theirs with him.

If a person is possessed of eyes that are gray, with a considerable amount of white ring about them, a scamp of the most heartless kind is behind them. All such persons are going over the country, playing gentleman, and giving accounts of their good standing and great acquaintances at home.

All such persons should be avoided, as much as a rattlesnake. In their breasts there is a serpent's heart, and in their heads a serpent's destructive poison.

Wherever a person is seen with small sharp eyes, winking as frequently as a toad's, and closed when he smiles, a miser and trickster is seen behind these winking organs. A mere cat, in greed and heartlessness, is given a human aspect.

They never have any more honesty than will enable them to keep out of prison. Such a person is as much a detriment to a society as a conflagration in property or a forest of wolves. Every motive of his life is the acquisition of property and the practice of cunning upon his neighbors.

Such a creature is generally found in every community of a few hundred people, and his sagacity, in ascertaining a locality from which to acquire victims and property, is as great and of precisely the same character as that manifested by a leopard or panther when it is attempting to find new fields for its depredations. Only a more cunning brute is enclosed by the skin of one of these human creatures.

No person of noble soul should consider them anything more. They are the beings that are producing in part what are called hard times, and they are becoming so numerous and wealthy that the hard times will become continuous before long.

The most interesting eyes a person can own, are those that can talk when the tongue is silent. These eyes are in heads that are so full of charity, intelligence, and love that a volume of these qualities are exposed in such organs.

They are more proficient in the heads of woman, and they are the objects that are so hard for painters to copy. A woman of good qualities will talk with her eyes faster than a woman of bad disposition can with her tongue.

Now let us see what the nose can disclose of a person's character.

This wonderful index of an active brain is giving in the face of a talented person as good an illustration of the work the brain is doing as any one can care to see. The nose is almost entirely created by the brain. Its cartilage is but unsolid substance that the brain discharges, and what has been solidified constitutes the bone.

Every particle of the skull is a product of the brain, and it is merely the broken down portion of the cells of this organ that are thrown to the surface and hardened. The decomposition of the brain is what breaks the cells into pieces. The only change that takes place in the brain is the destruction of the cells, and the construction of new ones, and each operation is performed by the sweep of the blood through the organ.

Every pulsation of the blood destroys a portion of these little globes and creates as many new ones. The cartilage of the nose is just so much unsolid substance of decomposed cells as the brain is capable of discharging in the direction of the point of the nose. What has had time to consolidate constitutes the crust of the organ. The cartilage is constantly renewed by the same process that the brain is renewed by.

This creation of a new point to the nose every day is what renders it capable of giving the drunkard a blossom of the habit of drinking. The alcohol, drunk, will increase the destruction of brain to such an extent as to give the drunkard a preponderate point to his proboscis.

The blood attracted to this heap of decomposing substance is like its operations in attending any part of the body where a destruction of substance is taking place. In this power of brain to enlarge one's nose, a chance is afforded an observer to discover the amount of thinking the possessor does.

If the nose is heaped up in the middle it shows that at an age when it was possible to commence the process of reasoning, a start was made in that direction, and the nose was constructed longer on that account, giving this organ a species of joint like that in a corn stalk. Without this additional joint a pug nose or very common construction will be seen. If this heap in the nose is quite abrupt, a very sudden commencement of agitating the brain took place. On all such persons an enthusiastic and impetuous mind will be seen. If the brain is of uncommon size a great man is sure to possess such a nose. If the brain is small only an enthusiast will be discovered.

If this fact was sufficiently understood, a great amount of words would be saved by those possessing superior knowlodge. A person of great mind will always degrade himself by discussing any intellectual proposition with a person who cannot obtain a lasting impression of the idea. The person addressed is sure to consider his instructor a dunce, and will consider himself the savant.

The pug nose is always an indcx of a combatative disposition, and if the possessor is also possessed of a bushy hair on the back of his head, he will be as quarrelsome and dishonest as a leopard.

The pug nose is the best possible evidence that the person has never obtained a great idea. A person who has no joint in his nose has never possessed one such thought. All their claims to wisdom are groundless, and it is uttterly useless to converse with them about anything that requires talent to understand. If the person can be made to see the idea or fact at the time of the conversation, he will be sure to forget it in an hour afterwards.

The long, straight nose is sure to disclose a persevering and cautious person. Such a person will make an inveterate enemy or a constant friend to one he is concerned with. The gradual growth of the nose is indicative of the gradual and constant work of the owner of the organ. If the brain is well balanced the person will employ his faculties to the advantage of the community as well as to himself. The nose is a constant assurance that the person will succeed.

Let us now see what an ear can reveal of the person. The ear is constructed by the same process as the nose, and it is only a welded cartilage, calculated to assist the auditory nerves in obtaining the effect of the atmosphere that produces sound. A common toad-stool is given its shape by a similar operation of a decomposing log. Only an uneven discharge of the substance of the ear creates its welded ridges. This work is all performed in the development of the fœtus.

The growth afterwards is uniform. Only in the size of a person's ears merely can any idea be obtained of the person's character. If they are large, a great brain is sure to be operating between them, and the ears are only vibrating in harmony with the operations. The thickness of the ear is only a result of the activity of the brain. If the person is honest, this condition of the ear is a good promise of a good citizen, and if he is dishonest, it is evidence of great activity in his rascality.

This is all an ear can teach of a person's constitution.

The hair shall now receive our consideration. This adornment of the head is another production of the brain, and it consists of a great number of hollow spears, as much like a horn as a thing so small can be. The color of the hair is what will denote the person's disposition, and the size of its spears is what will denote the quality of brain. If the hair is coarse, no matter what its color, the brain is sure to be only a mere animal organ. The cells of the brain are large and the decomposition slow. If the person's hair is both coarse and red, he will create a great deal of trouble in a community, and give the police magistrate frequent calls. If the hair is coarse and black a mere loafer will own it. He will be seen on the corners of streets staring at the female passers, and will be in a physician's office reeking with disease in a few years. If he is not a drunkard, it is because he has got excitement enough of the brain without alcohol. The hair is black always because it has been

burned to a charcoal on its surface by a brain that cannot employ the electrity its decomposition generates in a good work. Such a person is always in active search of what will satisfy passion only.

If the hair is coarse and sandy (we mean the color of sand), a very ordinary and peaceable citizen is seen. The world possesses more of this character of persons than any other. Now, all that renders a person's hair of this color is a moderate amount of burning of the tubes.

The color will in every instance be sure to give people a sufficient evidence of an ordinary person.

What a great advantage it will be to those contemplating matrimony if the oposite sex possesses a sure indication of the character desired!

The fancied being is sure to possess the indication, and it has only to be understood to be all that can be desired.

Every person will disclose their amount of conversational powers when a courtship is going on.

The only want in this respect will be a want of truthfulness in what they say; the most wanting person will be the most wanting in this respect. In each courtship a determined effort is generally made to deceive the opposite sex as much as possible. The fruits of the work are a life-long disappointment and quarrelling. In every instance of deception a penalty of this character follows. No one will deny this, who has been informed by a wife or husband that if he or she had only known that he or she possessed such a disposition, he or she would never have married the deceitful object.

Let us inform the young man and young woman, that all the deceit that a lover can practice will be of no avail if they can understand the evidence of a person's disposition. What has already been stated is quite enough if it is remembered, but there are other means of detecting the character of a lover.

If the young man is able to go and see his sweetheart in the day time, and without improving his appearance, he will be sure to be found all he pretends to be in the way of appearance and character.

If the young lady is able to call on the young gentleman's mother in her every day apparel, she will be sure to be all she pretends to be in the way of character and appearance.

In these simple exhibitions of sincerity, there is all a person needs of acquaintance with the constitutton of mind and principle of a bride or bridegroom.

All the conversation and gallantry of a young man will disclose nothing of his character. All the affability of a young lady will disclose nothing of her character. The only way to ascertain the knowledge of the organization of ei er, is by the observation of what has been pointed to.

Now, we will add to these brief statements of the evidence of character, the impertinent remark, that in every community there is but one in several thousand of the people who is possessed of great talent. Sometimes there is not one. All the great men or great women of the world will not exceed one thousand at any period.

The other portions of a community are divided into what may be called well balanced and unbalanced. The well balanced will be the thrifty and influential class, and the unbalanced will constitute the criminal and slothful classes.

The criminals will constitute about one in a hundred, and the slothful about one in fifty. These averages are usually observed in a community that is old. In a new community the isparity is greater, according to the induc ments that created the community.

No great mind is ever seen by the community he lives in.

The people about him are the last to find out what he is. It must be learned from people away.

When it is learned, the first inquiry in the the minds of those around him, is, whether the fact cannot be overthrown, or his reputation destroyed. If they conclude this cannot be done, they will commence a fawning and adulation and try to become his friends, in his mind. When this fails to bestow greatness on them, they will begin to gather sour grapes in the nature of constant malignity and slander.

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